

KHALSA COLLEGE

GARHDIWALA-HOSHIARPUR

Affiliated to Panjab University, Chandigarh Re-Accredited with 'A' Grade by NAAC

PROGRAMME AND COURSE OUTCOMES FOR ALL PROGRAMMES (2022-23)

SERIAL NO.	NAME OF THE COURSE	PAGE NO.	
	UNDER-GRADUATE DEGREE	E PROGRAMMES	
1.	BACHELOR OF ARTS (B.A.)	2	
2.	BACHELOR OF COMPUTER APPLICATION (B.C.A.)	117	
3.	BACHELOR OF COMMERCE(B.COM)	140	
4.	BACHELOR OF SCIENCE (B.SC.)	161	
5.	BACHELOR OF SCIENCE (AGRICULTURE)	209	
6.	BACHELOR OF SCIENCE (FASHION DESIGNING)	219	
	POST-GRADUATE DEGREE PROGRAMMES		
7.	MASTER OF ARTS (PUNJABI)	237	
8.	MASTER OF ARTS (POLITICAL SCIENCE)	266	
9.	MASTER OF COMMMERCE (M.COM)	288	
10.	MASTER OF CHEMISTRY (M.SC. CHEMISTRY)	304	
POST-GRADUATE DIPLOMA COURSE			
11.	BACHELOR OF LIBRARY AND INFORMATION SCIENCE (B.LIB.)	321	
12.	POST GRADUATE DIPLOMA IN COMPUTER APPLICATICATION (PGDCA)	328	

BACHELOR OF ARTS (B.A.)

PROGRAM OUTCOMES (POs)

After completing BA program students will be able to:

PO1: use the acquired knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.

PO2: possess the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking.

PO3: appear for various competitive examinations or choose the post graduate programme of their choice.

PO4: acquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.

PO5: be ignited enough to think and act over for the solution of various issues prevailed in the human life to make this world better than ever.

PO6: become a responsible citizen.

PROGRAM SPECIFIC OUTCOMES (PSOs)

After completing BA program, students will be able to:

PSO1: possess a good knowledge and clarity of concepts related to the subjects chosen by the students.

PSO2: apply the acquired knowledge to solve problems in the relevant field.

PSO3: show a developed critical and analytical sense.

PSO4: have a good vocabulary and writing skills appropriate to the subject.

PSO5: have a wider mental horizon and better self-confidence.

COURSE OUTCOMES (COs)

SEMESTER-1		
COURSE CODE	COURSE NAME	COURSE OUTCOMES
	COMP	PULSORY SUBJECTS
0001	English	Students after completing this course, will be able to: CO1: describe two prominent genres of literature; poetry and prose. CO2: correctly use English grammar in writing and speaking. CO3: explain key concepts like Racism, American, Civil war, Slavery, Emancipation Proclamation. CO4: infer the important role played by regional/writings. CO5: logically and objectively evaluate a text and communicate the same (both verbally and in writing) with clarity. CO6: read with fluency while simultaneously comprehending progress in English.
0002/0003	Punjabi/History and Culture Of Punjab	After completing Punjabi course the students can: CO1: ਕਾਵਿ ਸੁਮੇਲ ਪਾਠ ਪੁਸਤਕ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਆਧੁਨਿਕ ਦੌਰ ਦੇ ਕਵੀਆਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਦੁਆਰਾ ਸਮਾਜਿਕ ਮਸਲਿਆਂ ਬਾਰੇ ਸੂਝ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ I ਸਾਹਿਤਕ ਖੇਤਰ ਵਿਚ ਕਵੀਆਂ ਦੇ ਯੋਗਦਾਨ ਤੋਂ ਪ੍ਰੇਰਿਤ ਹੇ ਕੇ ਖੁਦ-ਬ-ਖੁਦ ਸਾਹਿਤਕ ਰਚਨਾ ਲਿਖਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ I ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਰਚਨਾਤਮਕ ਹੁਨਰ ਦਾ ਨਿਰਮਾਣ ਹੁੰਦਾ ਹੈ I CO2: ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੀਆਂ ਵੱਖ-ਵੱਖ ਵਿਧਾਵਾਂ ਕਵਿਤਾ, ਗ਼ਜ਼ਲ, ਗੀਤ ਅਤੇ ਰੁਬਾਈ ਦੇ ਕਲਾਤਮਕ ਪੱਖਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I CO3: ਵਿਦਿਆਰਥੀ, ਵੱਖ-ਵੱਖ ਵਿਸ਼ਿਆਂ ਉੱਪਰ ਨਿਬੰਧ ਰਚਨਾ ਦੁਆਰਾ ਜੀਵਨ ਅਤੇ ਸਮਾਜ ਦੇ ਅਲੱਗ-ਅਲੱਗ ਪਹਿਲੂਆਂ ਨੂੰ ਆਪਣੇ ਨਜ਼ਰੀਏ ਤੋਂ ਦੇਖਣ-ਪਰਖਣ ਦੇ ਸਮੱਰਥ ਹੁੰਦੇ ਹਨ ਅਤੇ ਵਿਦਿਆਰਥੀ ਚਲੰਤ ਮਸਲਿਆਂ ਉੱਪਰ ਲਿਖਣ ਦੇ ਸਮੱਰਥ ਹੁੰਦੇ ਹਨ I ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਰਚਨਾਤਮਕ ਹੁਨਰ ਨੂੰ ਉਤਸ਼ਾਹ ਮਿਲਦਾ ਹੈ I CO4: ਪ੍ਰੈਸੀ ਰਚਨਾ (ਸੰਖੇਪ ਰਚਨਾ) ਵਿਦਿਆਰਥੀ ਅੰਦਰ ਕਿਸੇ ਵੀ ਰਚਨਾ ਨੂੰ ਲਿਖਣ, ਪੜ੍ਹਨ, ਅਤੇ ਬੋਲਣ ਸਮੇਂ ਘੱਟ ਤੋਂ ਘੱਟ ਸ਼ਬਦਾਂ ਵਿਚ ਕਹਿਣ ਦੀ ਰੁਚੀ ਪੈਦਾ ਕਰਦੀ ਹੋਈ ਕਿਸੇ ਰਚਨਾ ਨੂੰ ਡੂੰਘਾਈ ਵਿਚ ਜਾ ਕੇ ਪਰਖ- ਪੜਚੋਲ ਕਰਨ ਦੇ ਸਮੱਰਥ ਬਣਾਉਂਦੀ ਹੈ I ਇਹ ਰਚਨਾ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ

ਸਮੇਂ ਅਤੇ ਊਰਜਾ ਸ਼ਕਤੀ ਦੀ ਬੱਚਤ ਕਰਨਾ ਸਿਖਾਉਂਦੀ ਹੈ I ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਗੱਲ ਨੂੰ ਸੰਖੇਪ ਅਤੇ ਸਪੱਸ਼ਟ ਕਹਿਣ ਦੇ ਕਾਬਿਲ ਬਣਦੇ ਹਨ I

CO5: ਵਿਆਕਰਣ ਦੀ ਸਿੱਖਿਆ ਪ੍ਰਾਪਤ ਕਰਨ/ਪੜ੍ਹਨ ਸਮੇਂ ਵਿਦਿਆਰਥੀ ਜਿਥੇ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਬਾਰੇ ਡੂੰਘਾਈ ਵਿਚ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ ਉੱਥੇ ਪੰਜਾਬੀ ਦੇ ਇਕ-ਇਕ ਸ਼ਬਦ ਦੇ ਪਿੱਛੇ ਅੰਦਰੂਨੀ ਨਿਯਮਾਂ ਦੇ ਕਾਰਜਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I ਭਾਸ਼ਾ ਦਾ ਇਕ-ਇਕ ਸ਼ਬਦ ਕਿਵੇਂ ਹੋਂਦ ਵਿਚ ਆਉਂਦਾ ਹੈ I ਫਿਰ ਸ਼ਬਦਾ ਤੋਂ ਵਾਕ, ਉਪਵਾਕ, ਪੈਰ੍ਹੇ ਅਤੇ ਫਿਰ ਸਮੁੱਚੀ ਰਚਨਾ ਕਿਵੇਂ ਤਿਆਰ ਹੁੰਦੀ ਹੈ I ਕਿਸੇ ਵੀ ਭਾਸ਼ਾ ਨੂੰ ਸਿੱਖਣ ਲਈ ਵਿਆਕਰਣ ਦੀ ਪੜ੍ਹਾਈ ਅਤੇ ਜ਼ਰੂਰੀ ਹੈ I

Punjabi course outcomes translated into English

- CO1: Through the study of poetry composition textbook, students gain insight into social issues through the works of modern period poets. Being inspired by the contribution of poets in the literary field, they become capable of writing literary works on their own. Creative skills are encouraged in the students.
- CO2: Students acquire knowledge about various genres of literature poetry, ghazal, song, and Rubai.
- CO3: Students are able to examine different aspects of life and society from their own perspective through essay writing on various topics and students are able to write on current issues.

 Creative skills of students are encouraged.
- CO4: Pressi Rachna (brief composition) makes the student capable of in-depth analysis of any composition while creating interest in writing, reading, and speaking in minimum words. This composition teaches students to save time and energy. Students can express themselves concisely and clearly.
- CO5: While learning/reading grammar, students gain in-depth knowledge about their mother tongue, and they also gain information about the functions of grammatical rules behind each word of Punjabi. How each word of the language comes into being. Then how is the sentence, sub-

		cantance personal and whole composition
		sentence, paragraph, and whole composition
		prepared from the word? Studying grammar is
		essential for learning any language.
		History and Culture of Punjab
		After completion of this course, the students will be
		able to:
		CO1: explain about 1st civilization of Punjab i.e.
		Harappan culture, its social, economic &
		religious life.
		CO2: explain about Rig Vedic and later Vedic age,
		their political, social, economic and religious
		aspects. CO3: explain about Caste System, its origin and
		Evolution.
		CO4: explain about two epics i.e. Ramayana and
		Mahabharata.
		CO5: explain about the political condition of India on
		the end of Alexander's invasion, and the impact
		of Alexander's invasion on social and
		cultural life.
		CO6: explain about the position of women during
		Harappan, early Vedic and later Vedic Age.
		CO7: describe about important historical places of
		Punjab in the outline map of Punjab.
	ELECTIVE	SUBJECTS (ANY THREE)
0008/0004/	Punjabi/English/Hindi	Punjabi
0007		CO1: ਭਾਈ ਵੀਰ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਪੜ੍ਹਾਕੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਕੁਦਰਤੀ ਖੂਬਸੂਰਤੀ ਰੱਬੀ ਪਿਆਰ ਤੇ ਜ਼ਿੰਦਗੀ ਦੇ ਰੁਝੇ ਵਿਆਂ ਵਿੱਚੋਂ ਖੂਬਸੂਰਤੀ ਦੀ ਝਲਕ ਨਜ਼ਰ ਆਉਂਦੀ ਹੈ।
		CO2. ਪ੍ਰੋ. ਪੂਰਨ ਸਿੰਘ- ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਕੁਦਰਤ, ਕਿਸਾਨ ਦੀ ਕਿਰਤ ਤੇ ਪੂਰਬੀ ਤੇ ਪੱਛਮੀ ਪੰਜਾਬ ਦੇ ਸੱਭਿਆਚਾਰ ਦੀ ਤਸਵੀਰ ਪੇਸ਼ ਕੀਤੀ ਹੈ।
		CO3. ਧਨੀ ਰਾਮ ਚਾਤ੍ਰਿਕ- ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰਮ ਤਿਉਹਾਰ ਤੇ ਮੇਲਿਆਂ ਨਾਲ ਸਬ [°] ਧਤ ਤੇ ਦੇਸ਼ ਭਗਤੀ ਦੇ ਭਾਵ ਪ੍ਰਗਟਾਉਂਦੀ ਹੈ।
		CO4. ਪ੍ਰੋ. ਮੋਹਨ ਸਿੰਘ ਦੀ ਕਵਿਤਾ ਰਾਹੀਂ ਮਾਂ-ਬੋਲੀ, ਪੁਰਾਤਨ

ਤੇ ਨਵਾਂ ਸੱਭਿਆਚਾਰਮ ਬਾਬੇ ਨਾਨਕ ਦੀ ਸੋਚ ਨੂੰ ਪ੍ਰਭਾਵਿਤ ਕਰਵਾਇਆ ਹੈ।

CO5. ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ- ਦੀ ਕਵਿਤਾ ਦੇਸ਼ ਵੰਡ ਤੋਂ ਲੈ ਕੇ ਰਾਜਨੀਤੀ ਦੀਆਂ ਉਲੰਘਣਾ ਨੂੰ ਖੋਲਦੀ ਕਵਿਤਾ ਹੈ।

CO6. ਬਾਬਾ ਬਲਵੰਤ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਜ਼ਿੰਦਗੀ ਦੇ ਹਾਲਤਾ ਨਾਲ ਜੁਝਣ ਤੇ ਜਿਉਣ ਦੀ ਵਿਧੀ ਦੱਸਦੀਆਂ ਹਨ।

CO7. ਸਿਵ ਕੁਮਾਰ ਬਟਾਵਲੀ ਦੀ ਕਵਿਤਾ ਬ੍ਰਿਹ ਦੀ ਕਵਿਤਾ ਹੈ ਕਵੀ ਨੇ ਜ਼ਿੰਦਗੀ ਦੇ ਦੁੱਖਾਂ ਨੂੰ ਗੀਤਾ ਰਾਹੀ ਖੂਬਸੂਰਤੀ ਨਾਲ ਪੇਸ਼ ਕੀਤਾ ਹੈ।

CO8. ਡਾ. ਹਰਿਭਜਨ ਸਿੰਘ- ਦੀ ਕਵਿਤਾ ਵਿੱਚ ਲੋਕਾਂ ਦੀ ਸੋਚ, ਹਾਲਾਤ ਤੇ ਡਾਕਟਰੀ ਸਹੂਲਤਾਂ ਦੀ ਦੁਰਵਰਤੋਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਹੈ।

CO9 ਡਾ. ਜਗਤਾਰ - ਦੀ ਕਵਿਤਾ ਮਾਰਕਸਵਾਦੀ ਦ੍ਰਿਸ਼ਟੀਕੋਣ ਪੇਸ਼ ਕਰਦੀ ਹੈ।

CO10. ਪੰਜਾਬੀ ਨਾਨਕ ਦੇ ਦਰਸ਼ਨ ਆਈ. ਸੀ ਨੰਦਾ ਦੇ ਇਕਾਂਰੀ ਵਿੱਚ ਮਨਜੋੜ ਵਿਆਹ ਦੀ ਸਮੱਸਿਆ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਹੈ।

CO11. ਬੇਈ ਮਾਨ ਇਕਾਂਚੀ ਵਿੱਚ ਗਰੀਬੀ ਦੀ ਮਜ਼ਬੂਰੀ ਦਾ ਨਿਜ਼ਾਇਜ਼ ਫਾਇਦਾ ਉਠਾਇਆ ਗਿਆ ਹੈ।

CO12. 'ਤਾਸ਼ ਦੀ ਬਾਜੀ' ਅਮਰੀਕ ਸਿੰਘ ਨੇ ਘਰੇਲੂ ਨੌਕਰਾਂ ਨੌਕਰਾਂ ਦੀ ਆਪਸੀ ਸਹਿਮਤੀ ਤੇ ਆਪਣੇ ਮਾਲਕਾ ਦੀ ਸੇਵਾ ਦੀ ਗੱਲ ਕੀਤੀ ਹੈ।

CO13. ਅੰਨੇ ਨਿਸ਼ਾਨਣੀ ਇਕਾਂਗੀ ਵਿੱਚ ਇਕਾਂਗੀਕਾਰ ਨੇ ਦੇਸ਼ ਦੀ ਵੰਡ ਸਮੇਂ ਹਾਲਾਤਾਂ ਨੂੰ ਬਿਆਨ ਕੀਤਾ ਹੈ ਕਿ ਲੋਕ ਬਿਨ੍ਹਾਂ ਸੋਚੇ ਸਮਝੇ ਇਕ ਦਸ਼ਮਣ ਰਹੇ।

CO14. 'ਅੰਨੇ ਕਾਵ' ਇਕਾਂਗੀ ਵਿੱਚ ਠੇਕੇਦਾਰ ਵੱਲੋਂ ਮਜ਼ਦੂਰਾਂ ਦੀ ਕਿਰਤ ਕਮਾਈ ਦਾ ਸ਼ੋਸਜ਼ ਕੀਤਾ ਗਿਆ ਹੈ, ਖੋਜੀ ਆ ਕੇ ਮਜ਼ਦੂਰਾਂ ਨੂੰ ਸੁਚ`ਤ ਕਰਦਾ ਕਿ ਤੁਹਾਡੇ ਨਾਲ ਧੋਖਾ ਹੋ ਰਿਹਾ ਹੈ।

CO15. ਪੰਜਾਬੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ 1901 ਤੋਂ 2000 ਤੱਕ ਭਾਸ਼ਾ, ਉਪਭਾਸ਼ਾ, ਸਾਹਿਤ ਦੇ ਰੂਪ-ਗੀਤ, ਗਜ਼ਲ, ਕਵਿਤਾਮ ਨਾਵਲ, ਕਹਾਣੀ ਆਦਿ।

CO16. ਪੰਜਾਬੀ ਨਾਵਲ ਬਲਦੇ ਦੀਵੇ) ਵਿਸ਼ਾ, ਵਿਧੀ, ਪਲਾਟ ਤੇ ਪਾਤਰ-ਚਿਤਰਨ ਸਾਹਿਤ ਦੀ ਪਰਿਭਾਸ਼ਾ, ਪ੍ਰਕਿਰਤੀ, ਪ੍ਰਯੋਜਨ ਦੇ ਤੱਤ।

Translation into English

CO1: By teaching the poems of Bhai Vir Singh, the students get a glimpse of natural beauty, divine love and the beauty of life's busyness.

CO2: Prof. Through Puran Singh's poems, nature, farmer's work and the culture of East and West

Punjab have been presented.
CO3: Dhani Ram Chatrik's poems express feelings of
patriotism and celebration of Punjabi cultural
festivals and fairs.
CO4: Prof. Through the poetry of Mohan Singh,
mother tongue, ancient and new culture have
influenced the thinking of Baba Nanak.
CO5: Amrita Pritam's poem is a poem that reveals the
violation of politics since the partition of the
country.
CO6: Through the poems of Baba Balwant, they tell
the method of living and coping with the
conditions of life.
CO7: Siv Kumar Batavli's poem is Briho's poem. The
poet has beautifully presented the sorrows of life
through Gita.
CO8: Dr. Haribhajan Singh's poem has given
information about people's thinking, conditions
and misuse of medical facilities.
CO9: Dr. Jagtar's poem presents a Marxist perspective.
touch
CO10: Darshan of Punjabi Nanak. C. Nanda's
Ekanari presents the problem of arranged
marriage.
CO11: In Bei Maan Ikanri, the compulsion of poverty
has been taken advantage of.
CO12: 'Tash Di Baji' Amrik Singh has talked about the
mutual consent of domestic servants and
servants to serve their mistresses.
CO13: In Anne Nishani Ekangi, the loner has described
the situation at the time of partition of the
country that the people remained one enemy
without thinking.
CO14: In 'Anne Kaw' Ekangi, the labor earnings of the
workers are investigated by the contractor, the
inspector comes and informs the workers that
7

	you are being cheated.
	CO15: History of Punjabi literature from 1901 to 2000
	language, dialect, forms of literature-songs,
	ghazals, kavitam novels, stories etc.
	CO16: Punjabi Novel Balde Diwe) Theme, Method,
	Plot and Characterization Definition, Nature,
	Purpose Elements of Literature.
	English
	CO1: explain different literacy terms and concepts
	with important literary devices/ historical context
	or across a wide range of literary genres.
	CO2: describe about different genres of poetry, prose,
	drama, etc.
	CO3: develop a proper understanding of the
	grammatical system of the English language with
	equal emphasis on learning skills like reading,
	listening, speaking, and writing.
	CO4: achieve accuracy in writing skills and improve
	vocabulary.
	CO5: develop an understanding of various topics of
	grammar like the transformation of sentences.
	CO6: do critical analysis to get a better understanding
	of work in literature.
	CO7: use words/phrases etc. for effective English
	speaking and writing.
	HINDI
	r विद्यार्थी कबीर के जीवन, रचनाओं, काव्यगत विशेषताओं और
कवितालोक (काव्य-पुस्तक)	दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
r कबीर	r विद्यार्थी कबीर के पदों के माध्यम से निराकार ईश्वर के सम्बंध
	में ज्ञान प्राप्त करने के साथ-साथ उनकी हिन्दू-मुस्लिम की भिक्त
r रैदास	को लेकर की गई आलोचना से यह समझने में सक्षम होंगे कि ईश्वर
	को आडम्बरों से नहीं, प्रेम से पाया जा सकता है।

r गुरु नानक देव	r विद्यार्थी कबीर की साखियों से विविध मानवीय मूल्यों और नीति-आदर्शों का ज्ञान प्राप्त करेंगे। कबीर के सुखी और सहज
r सूरदास	जीवन जीने की कला से विद्यार्थी परिचित होकर लाभ प्राप्त करेंगे।
	r विद्यार्थी रैदास के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
	r विद्यार्थी रैदास के पदों और साखियों से यह सीखेंगे कि निराकार की भिक्त के लिए प्रेम और विशुद्ध मन की आवश्यकता होती है। वे यह समझेंगे कि ईश्वर भिक्त के मन की भावना को देखकर उस पर अपना प्रेम बरसाता है।
	r विद्यार्थी गुरु नानक देव के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
	r विद्यार्थी गुरु नानक देव जी की आदि ग्रंथ में संकलित वाणी से उनके विविध विचारों से परिचित होंगे। गुरु जी की वाणी निर्भय- निरवैर रहकर प्रत्येक मनुष्य को ईश्वर की रजा में रहकर जीवन जीने की कला सिखाती है।
	r विद्यार्थी सूरदास के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
	r विद्यार्थी बाल-लीला, मथुरा गमन, भ्रमर-गीत आदि रचनाओं के माध्यम से सूरदास की कृष्ण भिक्त से परिचय प्राप्त करेंगे। सूरदास ने शृंगार और वात्सल्य रसों के माध्यम से कृष्ण जी के ऐसे-ऐसे चित्र प्रस्तुत किये हैं, जो सभी को भाव-विभोर करने में सक्षम हैं।
	r विद्यार्थी कथा-साहित्य के माध्यम से समाज और जीवन की विविध समस्याओं से अवगत होंगे और उन समस्याओं के समाधान के लिए प्रेरित होंगे। उनमें समस्या-समाधान की क्षमता विकसित होगी।
	r शतरंज के खिलाड़ी कहानी के माध्यम से विद्यार्थी यह जानने में

सक्षम होंगे कि किसी भी काम में की गई अति सदैव हानिकारक होती है। साथ ही विद्यार्थी लखनऊ के नवाबी दौर की विविध

गनीन ननिर्णं	परिस्थितियों और जीवन शैली का परिचय प्राप्त करेंगे।
सजीव कहानियां	पारास्त्रातया आर जावन शला का पारचय प्राप्त करग।
r शतरंज के खिलाड़ी	r ममता कहानी के माध्यम से विद्यार्थी मुगलिया दौर में पठान- मुगलों की साम-दाम की नीति को समझने के साथ-साथ हिन्दुओं
r ममता	के सनातनी मूल्यों और आदर्श परम्पराओं का परिचय प्राप्त करेंगे। सिहष्णुता, अतिथि-सत्कार, छल-कपटहीन आचरण जैसे गुणों को
r अशिक्षित का हृदय	जानकर विद्यार्थियों में नवीन जीवन-मूल्यों का आविर्भाव होगा।
r मौत के मुँह में	r अशिक्षित का हृदय कहानी के माध्यम से विद्यार्थी यह समझने में सक्षम होंगे कि सच्चे मन और सच्ची नीयत वाला व्यक्ति सदैव समाज
r न्याय मंत्री	में आदर-सम्मान पाता है। अशिक्षित होकर भी कोई व्यक्ति अपने
r गुलाब	आचरण और सच्चाई से सबका विश्वास प्राप्त कर सकता है। इस कहानी से विद्यार्थियों को यह सीख भी मिलती है कि जीने के लिए
r सत्त्य-असत्त्य	कई बार निर्जीव वस्तुएँ भी सहारा बन सकती हैं।
	r मौत के मुँह में कहानी के माध्यम से विद्यार्थी यह जानने में सक्षम
	होंगे कि आपदा में होश-हवास कायम रखकर और हिम्मत से काम
	लेकर बड़े-से-बड़े खतरे से भी पार पाया जा सकता है। इस कहानी
	से यह सीख भी मिलती है कि विद्यार्थियों को शस्त्र और शास्त्र
	दोनो का ज्ञान होना चाहिए, तभी वे जीवन के हर क्षेत्र में सफल हो सकेंगे।
	r न्याय मंत्री कहानी के माध्यम से विद्यार्थी आज से ख्रम् वर्ष पूर्व
	सम्राट अशोक के समय की न्याय व्यवस्था का ज्ञान प्राप्त करेंगे और
	अपनी तर्क-शक्ति को विकसित करने का प्रयास करेंगे।
	r गुलाब कहानी के माध्यम से विद्यार्थी यह जानने में सक्षम होंगे
	कि कैसे कोई गरीब परन्तु रहमदिल व्यक्ति एक खोई हुई मासूम
	बालिका के लिए अपने जीवन-भर की कमाई लुटा देता है और
	उसके वापिस लौट जाने पर अपने प्राण त्याग देता है। वे यह जान
	पाएँगे कि इंसानियत का सम्बंध धन-दौलत से नहीं बल्कि हृदय की
	निरीहता से होता है।
	r सत्त्य-असत्त्य कहानी के माध्यम से विद्यार्थी समाज के सत्त्य और असत्त्य कहलाने वाले वर्गों से परिचय प्राप्त करेंगे और जानेंगे कि अपनों पर कष्ट आने पर कैसे सत्त्य कहलाने वाले उच्च वर्ग के

वर्ग अभाव और विपरीत परिस्थितियों में भी अपनी फ़राख़िदली का परिचय देता है। r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे। r विद्यार्थी हिन्दी साहित्य के स्वजन की पृष्ठभूमि और साहित्यिक प्रवृतियों को समझने में सक्षम होंगे। r आदिकाल r आदिकाल r विद्यार्थी साहित्य के माध्यम से जीवन-मृल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। r आदिकाल को राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य को निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानो विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानो की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचत कराया जाएगा। r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि प्रत्येक वा∨य को शुद्ध रूप में पढ़ा/लिखा जाए। उसके लिए		लोगों का खून सफैद हो जाता है और असत्त्य कहे जाने वाला निर्धन
परिचय देता है। r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे। r विद्यार्थी हिन्दी साहित्य के सुजन की पृष्ठभूमि और साहित्यक प्रवृतियों को समझने में सक्षम होंगे। r आदिकाल r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितयों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचत होकर विद्यार्थी आदिकाल के साहित्य को निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धति से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।		
हिन्दी साहित्य का इतिहास प्रवृतियों कि समझने में सक्षम होंगे। प्रविद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। प्रवादिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितयों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। प्रविद्य कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत प्रविद्यी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। प्रविद्यी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।		
हिन्दी साहित्य का इतिहास प्रवृतियों कि समझने में सक्षम होंगे। प्रविद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। प्रवादिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितयों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। प्रविद्य कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत प्रविद्यी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। प्रविद्यी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।		
हिन्दी साहित्य का इतिहास प्रवृतियों हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक प्रवृतियों को समझने में सक्षम होंगे। प्रविद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। प्रआदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितयों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। प्रतिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत प्रतिचित्र करानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित्र कराया जाएगा। प्रहिन्दी कहानी प्रसुध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		
हिन्दी साहित्य का इतिहास प्रवृतियों हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक प्रवृतियों को समझने में सक्षम होंगे। प्रविद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। प्रआदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितयों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। प्रतिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत प्रतिचय कराया जाएगा। प्रहिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। प्रतिच्यी कहानी का परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।		
हिन्दी साहित्य का इतिहास प्रवृतियों को समझने में सक्षम होंगे। r आदिकाल r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी एक कला है। अत: यह आवश्यक है कि		r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे।
हिन्दी साहित्य का इतिहास प्रवृतियों को समझने में सक्षम होंगे। r आदिकाल r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी एक कला है। अत: यह आवश्यक है कि		
r आदिकाल r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे। r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक पिरिस्थितयों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से पिरिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। r हिन्दी कहानी की पिरभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को पिरिचत कराया जाएगा। r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		r विद्यार्थी हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक
को समझने का प्रयास करेंगे। r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि	हिन्दी साहित्य का इतिहास	प्रवृतियों को समझने में सक्षम होंगे।
को समझने का प्रयास करेंगे। r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		
r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि	r आदिकाल	r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन
परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी एक कला है। अत: यह आवश्यक है कि		को समझने का प्रयास करेंगे।
परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी एक कला है। अत: यह आवश्यक है कि		
रासो, बीसलदेव रासो आदि रचनाओं से परिचित होकर विद्यार्थी आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		r आदिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक
आदिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि		परिस्थितियों, साहित्यिक प्रवृतियों, नामकरण की समस्या, पृथ्वीराज
इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि		
सक्षम होंगे। r हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का पिरचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की पिरभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को पिरचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि		
 र हिन्दी कहानी विधा की शास्त्रीय पद्धित से विद्यार्थियों का पिरचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रितिपादित किया जाएगा। समीक्षा सिद्धांत र हिन्दी कहानी की पिरभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को पिरचित कराया जाएगा। र शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि 		
परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		सक्षम होगे।
परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		
परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा। ** ** ** ** ** ** ** ** **		दिही बदानी विश्वा की भारतीय मुद्रश्रदि में विद्यार्थियों का
समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		· · · · · · · · · · · · · · · · · · ·
समीक्षा सिद्धांत r हिन्दी कहानी की परिभाषा, कहानी के विविध तत्व और कहानी के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		· · · · · · · · · · · · · · · · · · ·
समाक्षा ।सद्धात बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		किया जाएगा।
समाक्षा ।सद्धात बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा। r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि		
r हिन्दी कहानी r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि	समीक्षा सिद्धांत	· ·
र सुर्य भागा रिखा एक करता है। जात, वह जाकरवक है। क		बहु-आयामा वंगाकरण स ।वद्यााथया का पाराचत कराया जीएगा।
	r हिन्दी कहानी	r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि
Note that the Atlanta of the total and a section of the total and a section of the total and a section of the total of the		
व्याकरण का ज्ञान और अत्त्यास परमावश्यक है।		
		THE COLUMN SICH SICH ACHIEVATOR OF
व्यावहारिक व्याकरण r हिन्दी व्याकरण से विद्यार्थी व्यावहारिक हिन्दी का ज्ञान प्राप्त	व्यावहारिक व्याकरण	र द्विन्दी व्याकरण से विदयार्थी व्यावहारिक दिन्दी का नान गणन
	ć	`
r समानार्थक शब्द करग	r समानार्थक शब्द	(भरग।
विद्यार्थी भाषा के ज्यानमधित पर को जार गाएंगे और		, विद्यार्थी भाषा के समहत्राधिक गण से सन गणांगे और
r विपरीतार्थक शब्द r विद्यार्थी भाषा के व्यावहारिक पक्ष को जान पाएंगे और	r विपरीतार्थक शब्द	
समानार्थक शब्द, विपरीतार्थक शब्द और अनेक शब्दों के लिए एक		समानायक शब्द, ।वपरातायक शब्द आर अनक शब्दा क लिए एक

	r अनेक शब्दों के लिए एक शब्द r शब्द और वा∨य शुद्धि r पारिभाषिक शब्दावली	शब्द आदि का ज्ञान प्राप्त करके अपनी शब्द-सम्पदा में वृद्धि कर पाएंगे। r शब्द और वाvय शुद्धि का अत्यास करके विद्यार्थी भाषा को शुद्ध और व्याकरण-सम्मत लिखने में सक्षम हो पाएंगे। r पारिभाषिक शब्दावली का ज्ञान प्राप्त कर विद्यार्थी यह जान पाएंगे कि विविध कार्यालयों में हिन्दी की पारिभाषिक शब्दावली का सटीक प्रयोग कैसे किया जाता है और इसकी आवश्यक्ता एवं उपयोगिता क्या है।
0023	History (History of India upto 1200 AD)	After completion of this course, the students will be able to: CO1: explain about the major sources of ancient Indian History i.e. Indigenous Literature and foreign accounts, Archaeological findings, inscriptions, coins. CO2: state about India's oldest and first civilization i.e. Harappan civilization; it's extent, town planning, social, religious and economic life. CO3: explain about life in Vedic and later Vedic age; It's Political, Economic, Social and Religious life CO4: explain about the Republic and Kingdom 600-321 B.C. CO5: explain about new religions in India in 6th century B.C. CO6: describe about the first empire of India i.e. The Mauryan Empire, it's Central and Provincial Administration, Ashoka's Dhamma CO7: state about the post Mauryan period, Decline of Mauryan and Kanishka and his achievements. CO8: state about the Gupta Empire i.e. the rise of Gupta's and social, economic, cultural, and scientific developments under Guptas.

		CO9: describe about the rise of southern kingdoms i.e.
		Administration under Pallavas, Rashtrakutas and
		Chalukyas.
		CO10: explain about Regional Kingdoms in the North
		i.e. Administration under Harsh vardhana
		Origin of Rajputs.
		CO11: explain about south Indian states i.e
		Administration traction under cholas, Taxation
		and trade under Pandayas.
		CO12: explain about Physical maps i.e. important
		historical places of ancient Indian literacy,
		Extent of Harappan civilization, Mauryan
		kingdom under Ashoka.
	Mathematics	
MAT-0043	(Plane Geometry)	After completing the course, students will be able to:
		CO1: analyze the concept of transformation of axes in
		two dimensions.
		CO2: describe the pair of straight lines, condition of
		parallelism and perpendicularity, joint equation
		of angle bisectors.
		CO3: solve the problems related to the concepts of
		circle and properties of circle, chord of contact,
		radical axis, co- axial family of circles, limiting
		points.
		CO4: discriminate about tangents, normals and their
		properties.
		CO5: calculate the properties of ellipse, Conjugate
		diameter of ellipse, hyperbola, asymptote and
		rectangular hyperbola.
		CO6: identify conics in general second degree
		equations.
		CO7: examine the general equations of second
		degree, tracing of ellipse, hyperbola and parabola
		and also get to know about the conics. They get
		to know whether a given second degree equation

		is a hyperbola or ellipse or parabola.
MAT-0044	(Calculus-I)	After completing the course, students will be able
		to:
		CO1: describe fundamental concepts of real numbers.
		CO2: solve the problems of Indeterminate forms and
		L'Hospital's Rule to find their limits
		CO3: verify the value of the limit of a function at a
		point using the definition of the limit.
		CO4: examine whether function is continuous or not,
		understand the consequences of the intermediate
		value theorem for continuous functions.
		CO5: apply various general Theorems like Rolle's
		Theorem, Lagrange's theorem, Cauchy Mean
		Value theorem, Taylor's theorem and their
		geometrical interpretation.
		CO6: analyze Hyperbolic and inverse hyperbolic
		functions, Successive differentiation and
		Leibnitz's theorem.
MAT-0045	(Trignometry and	After completing the course, students will be able
	Matrices)	to:
		CO1: operate methods to solve the equations
		CO2: recognize consistent and inconsistent system of
		linear equations by using row and column
		echelon form of the augmented matrix.
		CO3: solve linear equation using matrix method.
		CO4: apply Cayley Hamilton Theorem for finding the
		inverse of matrix.
		CO5: describe rank, Linear independence and
		dependence of matrices.
		CO6: appraise the importance of roots of real and
		complex polynomials.
		CO7: apply the applications of De Moivre's theorem to
		solve numerical problems.
		CO8: check diagonalisibility of matrices by finding
		Eigen values and vectors.
		CO9: calculate Hermitian and skew Hermitian matrices
<u> </u>	1	1/1

		and their properties.
	Agriculture	
0015	(Basics of Agricultural Botany and Forestry)	After the completion of the course, the students will be able to:
		CO1: explain about the plant morphology - root, stem,
		leaf -their types and modifications.
		CO2: explain about the Inflorescence - types and
		classification.
		CO3: explain about flower parts and their functions.
		CO4: describe about fruit - Types and classification.
		CO5: state about pollination - types, significance,
		emasculation, techniques, mode of reproduction
		and their significance Life cycle of a typical
		angiosperm.
		CO6: get skilled in plant breeding, introduction to self
		Incompatibility.
		CO7: explain about the cultivation practices including
		Soil requirements, water requirements, and
		improved varieties of the region for: Cereals
		(wheat, rice, maize), Fibres (cotton, Jute), oil
		Crops (sarson, soyabean), Fruits (mango, grapes, citrus, sapota).
		CO8: explain the importance of forests, important
		forest trees of India and status of forestry in
		Punjab, its significance. Raising of Nurseries
		for forestry. Social forestry: Definition, concept
		and its significance.
0095	Retail Marketing	The students who successfully complete this course
		will be able to:
		CO1: describe the theoretical and applied aspects of
		Retail marketing.
		CO2: define the various methods of classifying Retail
		formats.
		CO3: compare and contrast single Retail channel with
		Multi-Channel Retailing.

CS01 Computer Science (Computer Fundamentals) The students after completing this course, will b to: CO1: identify the components of a personal comparison system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	
support the multichannel shopping experies the future. CO6: describe the various retail Management issues. Computer Science (Computer Fundamentals) The students after completing this course, will be to: CO1: identify the components of a personal composite system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	
the future. CO6: describe the various retail Management issues. Computer Science (Computer Fundamentals) The students after completing this course, will be to: CO1: identify the components of a personal component system. CO2: do conversions in basic computer terminol construction of the component system. CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	l to
CO6: describe the various retail Management issues. Computer Science (Computer Fundamentals) The students after completing this course, will be to: CO1: identify the components of a personal composite system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	ence of
CS01 Computer Science (Computer Fundamentals) The students after completing this course, will b to: CO1: identify the components of a personal comparison system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	
CS01 Computer Fundamentals) The students after completing this course, will be to: CO1: identify the components of a personal composite system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	arketing
CS01 (Computer Fundamentals) The students after completing this course, will b to: CO1: identify the components of a personal computer terminol CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	
Fundamentals) to: CO1: identify the components of a personal composite system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	
system. CO2: do conversions in basic computer terminol CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	e able
CO3: describe the basic hardware peripherals. CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	nputer
CO4: describe the memory management. CO5: state the different types of software. CO6: explain about the operating system and its	logy.
CO5: state the different types of software. CO6: explain about the operating system and its	
CO6: explain about the operating system and its	
(DC Software) The students often completing this course will be	
(PC Software) The students after completing this course, will b	types.
CS02 (PC Software) The students after completing this course, will b	e able
CO1: solve common problems related to operati	ng
systems. CO2: use word processing, Spreadsheet and	
Presentation Graphics Software skills.	
CO3: compose, format and edit a word documer	nt
Excel, Presentation Slides.	11,
Exect, 1 resentation sinces.	
PCS01 (Practical Based on Paper CS02) The students after completing this course, will b	e able
CO1: state the working of Input and output devi-	000
CO2: run Internal and external DOS commands.	ces.
CO3: create Word, Excel, Presentation files and	
various commands on it.	
O036 Physical Education After the completion of the course, the students able to:	

		CO1: explain about Preliminary idea and History of
		Physical Education.
		CO2: describe the importance of warming up and
		Physical education.
		CO3: Analyse the behavior of India and World Physical
		Education
		CO4: organize the standard tournaments or
		competitions.
		CO5: develop Leadership skills.
		CO6: describe about components of physical fitness.
		CO7: describe about all sports schemes of physical education.
	Fashion Designing	After the course, the students will be able to:
0080	(Fundamentals of	CO1: use various tools in garment construction.
	Clothing)	CO2: do correct body measurements.
		CO3: apply the Garment construction techniques.
		CO4: use the techniques of Traditional Embroideries
		of India.
	Economics	
0017	(Micro Economics)	Students after completing this course will be able to:
		CO1: describe the basic concepts and models of
		Economics.
		CO2: analyze Consumer's behavior, demand analysis and demand forecasting.
		CO3: explain the concept of supply and law of supply.
		CO4: describe the concepts of cost and revenue
		Analysis.
		CO5: explain the market structure, price and output
		determination.
		CO6: describe production function theory and
		equilibrium.
		CO7: explain the various concepts of cost and
		traditional theory of cost.
		CO8: employ Factor pricing such as rent, wage, interest

		and profit.
		CO9: describe features of perfect competition,
		monopoly monopolistic competition, and to
		determine equilibrium under different market
		situations.
MUV0030	Music (Vocal)	On Completion of this course students would be able to:
		CO1: describe the basic terminologies of Indian music.
		CO2: write the practical compositions according to the
		Notation system.
		CO3: observe great contribution of Pt. V.N.
		Bhatkhande and they would be able to read and
		write compositions by studying notation system
		created by the legends.
		CO4: give a practical demonstration of the prescribed
		Ragas and to demonstrate various aspects of
		Ragas and their differentiation.
		CO5: describe the value of Indian Classical Music in
		modern period.
		CO6: play the basic Alankars on harmonium to know
		about the Swara notes.
	Political Science	
0033	(Political Theory-I)	After the course, the students will be able to:
		CO1: describe the significance of political theory.
		CO2: explain the theories, approaches, concepts and
		principles of political theory.
		CO3: describe the procedure of different theoretical
		ideas in political theory.
		CO4: interpret and assess information regarding a
		variety of political theory.
		CO5: explain the various traditional and modern
		theories of political science.
		CO6: evaluate the theories of origin of the state.
		CO7: comprehend the sources of political
		information.

SEMESTER-II		
COMPULSORY SUBJECTS		
0101	English	After this course, the students will be able to: CO1: describe the prescribed English text 'English and work' that represents vast knowledge of distinct cultures, manners, and experiences of various authors which helps the students to expand their horizons. CO2: develop an understanding of various topics of grammar like Narration, Conjunctions, etc. CO3: correctly use grammar. CO4: developing and improve reading, writing, speaking, and listening skills. CO5: do translation which would be helpful for effective English speaking.
0102/0103	Punjabi/History and Culture of Punjab	After completing Punjabi course, the students can: CO1: 'ਕਥਾ ਕਹਾਣੀ' ਪਾਠ ਪੁਸਤਕ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਜਿਥੇ ਕਹਾਣੀਕਾਰਾਂ ਦੇ ਜੀਵਨ ਅਤੇ ਚਰਨਾ ਸਬੰਧੀ ਸੰਖੇਪ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ ਉਥੇ ਕਹਾਣੀਕਾਰਾਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਦੁਆਰਾ ਸਮਾਜਿਕ, ਆਰਥਿਕ ਅਤੇ ਸਭਿਆਚਾਰਕ ਮਸਲਿਆਂ ਬਾਰੇ ਸੂਝ ਪ੍ਰਾਪਤ ਕਰਕੇ ਸਮਾਜ ਅੰਦਰ ਆਪਣਾ ਬਣਦਾ ਯੋਗਦਾਨ ਪਾਉਣ ਲਈ ਉਤਸ਼ਾਹਿਤ ਹੁੰਦੇ ਹਨ I ਇਨ੍ਹਾਂ ਸਾਹਿਤਕ ਰਚਨਾਵਾ ਦੁਆਰਾਂ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸੁਹਜ ਤ੍ਰਿਪਤੀ ਵੀ ਹੁੰਦੀ ਹੈ I CO2: ਵਿਦਿਆਰਥੀ ਸੂਚਨਾ ਹਿੱਤ ਨੋਟਿਸ ਲਿਖਣ ਵਾਲੇ ਭਾਗ ਨੂੰ ਪੜ੍ਹਦੇ ਸਮੇਂ ਸਾਹਿਤਕ, ਸਭਿਆਚਾਰਕ ਅਤੇ ਖੇਡ ਖੇਤਰ ਨਾਲ ਜੁੜੇ ਮਸਲਿਆਂ ਤੋਂ ਜਾਣੂੰ ਹੁੰਦੇ ਹਨ ਉਥੇ ਇਨ੍ਹਾਂ ਮਸਲਿਆਂ ਉੱਪਰ ਖੁਦ ਲਿਖਣ ਦੇ ਸਮੱਰਥ ਹੋ ਕੇ ਸਮਾਜ ਅੰਦਰ ਘੱਟ ਪੜ੍ਹੇ-ਲਿਖੇ ਜਾ ਅਨਪੜ੍ਹ ਵਰਗ ਦੇ ਲੋਕਾਂ ਦੀ ਮੱਦਦ ਕਰਨ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ I CO3: ਵਿਦਿਆਰਥੀ, ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ ਵਾਲੇ ਭਾਗ ਨੂੰ ਪੜ੍ਹਦੇ ਸਮੇਂ ਆਪਣੇ ਖਿੱਤੇ ਦੇ ਸਭਿਆਚਾਰ ਅਤੇ ਸਮਾਜ ਨਾਲ ਜੁੜ ਕੇ ਆਪਣੇ ਅਤੇ ਦੂਸਰੇ ਖਿੱਤਿਆਂ ਦੀ ਭਾਸ਼ਾ ਦੇ ਠੇਠ ਪੰਜਾਬੀ ਸ਼ਬਦਾਂ ਨੂੰ ਸਮਝਣ ਅਤੇ ਸਿੱਖਣ ਦੇ ਸਮੱਰਥ ਹੁੰਦੇ ਹਨ I CO4: ਵਿਆਕਰਣ ਦੀ ਸਿੱਖਿਆ ਪ੍ਰਾਪਤ ਕਰਨ/ਪੜ੍ਹਨ ਸਮੇਂ ਵਿਦਿਆਰਥੀ ਜਿਥੇ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਬਾਰੇ ਡੂੰਘਾਈ ਵਿਚ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ ਉੱਥੇ ਪੰਜਾਬੀ ਦੇ ਇਕ-ਇਕ ਸ਼ਬਦ ਦੇ ਪਿੱਛੇ ਅੰਦਰੂਨੀ ਨਿਯਮਾਂ ਦੇ ਕਾਰਜਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I ਭਾਸ਼ਾ ਦਾ ਇਕ-ਇਕ ਸ਼ਬਦ ਕਿਵੇਂ

ਸਮੁੱਚੀ ਰਚਨਾ ਕਿਵੇਂ ਤਿਆਰ ਹੁੰਦੀ ਹੈ I ਕਿਸੇ ਵੀ ਭਾਸ਼ਾ ਨੂੰ ਸਿੱਖਣ ਲਈ ਵਿਆਕਰਣ ਦੀ ਪੜ੍ਹਾਈ ਅਤੇ ਜ਼ਰੂਰੀ ਹੈ I

Punjabi course outcomes translated into English

- CO1: Through the study of the textbook Katha Kahani where the students get brief information about the life of the storytellers, they are encouraged to contribute to society by gaining insight into the social, economic, and cultural issues through the works of the storytellers. Through these literary works, the students also get aesthetic satisfaction.
- CO2: Students are aware of issues related to the literary, cultural, and sports fields while reading the information interest note writing section and can write on these issues themselves to help the less educated or illiterate people in society become capable
- CO3: Students can understand and learn common
 Punjabi words of their own and other regions &
 languages by connecting with the culture and
 society of their region while reading the Idioms
 and Phrases section.
- CO4: While learning/reading grammar, students gain in-depth knowledge about their mother tongue, and they also gain information about the functions of internal rules behind each word of Punjabi. How each word of the language comes into being. Then how is the sentence, subsentence, paragraph, and whole composition prepared from the word? Studying grammar is essential for learning any language.

History and Culture of Punjab

After competition of this course, the students will be able to:

CO1: describe about first empire of India which was Originated in Punjab i.e. Mauryan empire, its

		social, economic and religious life.
		CO2: explain about new religions originated in India in
		6 th century i.e. Buddhism and Jainism, Their
		impact and Punjab with special reference to 4th
		Buddhist Council.
		CO3: explain about the Kushanas dynasty, impact of
		Kanishka's rule on Punjab.
		CO4: explain about the Gandhara School of Art.
		CO5: explain about the Cultural and Scientific
		Developments under the Guptas.
		CO6: explain about the position of women under the
		Mauryas, Guptas and the Vardhanas.
		CO7: explain about Depiction of Punjab in the account
		of chinese travelers, Fahien and When Tsang.
		CO8: explain about main development in Literature.
		CO9: describe about education in ancient times and
		Significant development of Taxila.
		CO10: explain about social and culture on the eve of
		The Turkish Invasion of Punjab.
		CO11: explain about Punjabi in the Kitab-ul-Hind of
		Alberuni.
		CO12: explain about important historical places of
		Punjab in an outline map of Punjab.
393	Environment and Road	After the course, the students will be able to:
	Safety Education	CO1: describe about plant and animal distribution
		patterns in relation to biotic and biotic factors.
		CO2: explain about essential characteristics underlying
		Natural ecosystems.
		CO3: describe about the model population and
		community-level dynamics.
		CO4: interpret and present ecological results.
		CO5: identify Global environmental problems.
		CO6: explain about Social issues and Environment
		issue.
		CO7: describe the significance of road safety.

		CO8: state about Police-Public relationship, Traffic
		rule and Traffic signs.
		CO9: describe about Protective provisions against
		domestic and sexual violence.
		CO10: explain about the Protective laws for women.
		CO11: explain about the problem of drugs abuse.
		CO12: describe about the drugs and its effects.
		CO13: describe about the prevention and management
		of drug abuse.
	ELE	CTIVE SUBJECTS
0109/0105/ 0108	Punjabi/English/Hindi	Punjabi
	'ਨਕਸ਼ ਨੁਹਾਰ' ਕਾਵਿ ਪੁਸਤਕ	CO1: ਪਾਸ਼- ਚਿੰਨਾ ਤੇ ਸੰਕੇਤਾਂ ਦਾ ਮਾਧਿਅਮ ਬਣਾ ਕੇ ਆਪਣੇ ਜੁਝਾਰੂ ਵਿਦਰੋਹੀ ਭਾਵਾਂ ਨੂੰ ਪੇਸ਼ ਕਰਦਾ ਹੈ। ਉਸਦਾ ਇਹ ਜੀਵਨ ਅਨੁਭਵ ਕੌਮ ਵਿੱਚ ਨਵੀਂ ਸੂਝ ਪੈਦਾ ਕਰਦਾ ਹੈ। ਉਹ ਸਾਮਰਾਜਵਾਦ ਨੂੰ ਅਸਲ ਰੂਪ ਵਿੱਚ ਪੇਸ਼ ਕਰਦਾ ਹੈ ਨਾਂ ਕਿ ਜਬਰ, ਜੁਲਮ ਤੇ ਅਨਿਆਂ ਹੇਠ ਕੁਚਲੀ ਹੋਈ ਜਿੰਦਗੀ ਤੇ ਖੁਸ਼ੀ ਨੂੰ ਲਾਰਿਆਂ ਤੇ ਸੁਪਨਿਆਂ ਹੇਠ ਲਪੇਟਣਾ ਨਹੀਂ ਚਾਹੁੰਦਾ।
		CO2 ਸੰਤ ਰਾਮ ਉਦਾਸੀ-ਦੇ ਗੀਤ ਤੇ ਕਵਿਤਾਵਾਂ ਵਿੱਚ ਦੇਸ਼-ਪਿਆਰ ਤੋਂ ਇਲਾਵਾ ਸਰਮਾਏਦਾਰੀ, ਜਗੀਰਦਾਰੀ ਦੀ ਲੁੱਟ-ਖਸੁੱਟ ਨੂੰ ਖਤਮ ਕਰਨ ਦੇ ਭਾਵ ਪ੍ਰਗਟ ਕੀਤੇ ਹਨ। ਕਵੀ ਕਿਸਾਨਾਂ ਨੂੰ ਆਪਣੇ ਹੱਕ ਪ੍ਰਾਪਤ ਕਰਨ ਲਈ ਇਕੱਠੇ ਹੋ ਕੇ ਹੰਭਲਾਂ ਮਾਰਨ ਲਈ ਕਹਿੰਦਾ ਹੈ ਤੇ ਗਰੀਬ ਕਿਰਤੀ ਲੋਕਾਂ ਦੀ ਦੁਰਦਸ਼ਾ ਭਰੀ ਹਾਲਤ ਨੂੰ ਬਿਆਨ ਕਰਦਿਆਂ ਕ੍ਰਾਤੀਕਾਰੀ ਭਾਵ ਪ੍ਰਗਟ ਕਰਦਾ ਹੈ। ਉਹ ਕ੍ਰਾਂਤੀ ਲਿਆ ਕੇ ਉਸਦੀ ਮਿਹਨਤ ਦੇ ਮਿੱਠੇ ਫਲ ਦੀ ਰਾਖੀ ਕਰਨ ਦੀ ਪ੍ਰੇਰਨਾ ਦਿੰਦਾ ਹੈ।
		CO3 ਸਰਜੀਤ ਪਾਤਰ-ਕਵੀ ਸੰਘਰਸਸ਼ੀਲ ਰਹਿ ਕੇ ਬੰਦੇ ਨੂੰ ਵਫਾਦਾਰੀ, ਕੌਲਾਂ ਤੇ ਇਕਰਾਰਾਂ ਭਰੇ ਜੀਵਨ ਜਿਊਣ ਦੀ ਥਾਂ ਸ਼ਿਦਤ ਭਰਿਆ ਜੀਵਨ ਗੁਜਾਰਨ ਦੀ ਸਲਾਹ ਦਿੰਦਾ ਹੈ। ਮਾਂ ਦੀ ਸੰਵੇਦਨਾਂ ਨੂੰ ਬਿਆਨ ਕਰਦਾ ਹੋਇਆ ਦੱਸਦਾ ਹੈ ਕਿ ਮਾਂ ਆਪਦੇ ਪੁੱਤਰ ਦੇ ਕਾਗਜਾਂ ਨੂੰ ਸੀਨੇ ਨਾਲ ਲਾ ਕੇ ਰੱਖਦੀ ਹੈ।
		CO4 ਜਸਵੰਤ ਦੀਦ-ਕਵੀ ਇਹ ਦੱਸਣ ਦੀ ਕੋਸ਼ਿਸ਼ ਕਰਦਾ ਹੈ ਕਿ ਵਰਤਮਾਨ ਮਨੁੱਖ ਲਈ ਮਾਪਿਆਂ, ਪ੍ਰੇਮਿਕਾ ਤੇ ਪਤਨੀ ਆਦਿ ਸਭ ਰਿਸ਼ਤੇ ਕੇਂਦਰਿਤ ਜੀਵਨ ਸਾਹਮਣੇ ਫਿੱਕੇ ਪੈ ਚੁੱਕੇ ਹਨ। ਕਵੀ ਅਸੰਤੁਲਿਤ ਜੀਵਨ ਨੂੰ ਪੇਸ਼ ਕਰਦਿਆਂ ਸੱਚ ਨੂੰ ਪੇਸ਼ ਕਰਨ ਤੋਂ ਗੁਰੇਜ਼ ਕਰਦਾ ਹੈ। ਵੱਡੇ-ਵਡੇਰਿਆਂ ਦੁਆਰਾ ਰਸਮਾਂ-ਰੀਤਾਂ ਤੇ ਅੰਧ- ਵਿਸ਼ਵਾਸਾਂ ਵਿੱਚ ਬੰਨੇ ਸਮਾਜ ਦੇ ਵਰਤਾਰੇ ਪ੍ਰਤੀ ਉਦਾਸੀਨਤਾ ਦੇ ਭਾਵ ਨੂੰ ਪ੍ਰਗਟ ਕਰਦਾ ਹੈ ਤੇ ਅਗਲੀਆਂ ਪੀੜ੍ਹੀਆਂ ਨੂੰ ਇਸ ਤੋਂ ਮੁਕਤ ਕਰਨ ਦੀ ਕੋਸ਼ਿਸ਼ ਕਰਦਾ ਹੈ।
		CO5 ਨਵਤੇਜ ਭਾਰਤੀ- ਕਵੀ ਮਨੁੱਖ ਨੂੰ ਹਮੇਸ਼ਾ ਤੁਰਦੇ ਰਹਿਣ, ਵੇਖਦੇ ਰਹਿਣ ਤੇ ਪਿਆਰ ਕਰਨ ਦੀ ਰੌਂ ਨੂੰ ਚਲਦੇ ਰੱਖਣ
		ਦੀ ਇੱਛਾ ਬਣਾਈ ਰੱਖਣ ਲਈ ਤਿਆਰ ਕਰਦਾ ਹੈ l ਕਵੀ ਮਨੁੱਖ ਦੀ ਅਸੰਤੁਸ਼ਟ ਮਾਨਸਿਕ ਅਵਸਥਾ ਨੂੰ ਪੇਸ਼ ਕਰਦਾ
		ਹੈ। ਉਹ ਹਮੇਸ਼ਾ ਪੰਛੀ ਬਣਨਾ ਲੋਚਦਾ ਹੈ। ਉਹ ਪਰਮਾਤਮਾ ਤੋਂ ਮਨੁੱਖੀ ਪ੍ਰੇਮ-ਪਿਆਰ ਤੇ ਮੇਲ ਮਿਲਾਪ ਦੇ ਸ਼ਬਦਾਂ ਦੀ ਮੰਗ ਕਰਦਾ ਹੈ।
		CO6 ਸੁਖਵਿੰਦਰ ਅੰਮ੍ਰਿਤ- ਕਵਿਤਰੀ ਕਹਿੰਦੀ ਹੈ ਕਿ ਜਦੋਂ ਉਸਦੀ ਦੁਨਿਆਵੀ

ਬਹਿਸ ਨਾਂ ਮੁੱਕੀ ਤਾਂ ਉਸਨੇ ਗੱਲ ਹੀ ਮੁਕਾ ਦਿੱਤੀ। ਉਹ ਮੂੰਹ ਮੋੜਨ ਤੇ ਇਕਰਾਰ ਤੋੜਨ ਨਾਲੋਂ ਤਾਂ ਮੌਤ ਨੂੰ ਤਰਜੀਹ ਦਿੰਦੀ ਹੈ। ਕੱਲ ਉਹ ਪੇਕੇ ਘਰ ਵਿੱਚ ਪਰਾਈ ਸੀ ਤੇ ਅੱਜ ਸਹੁਰੇ ਘਰ ਵੀ ਪਰਾਈ ਹੈ, ਬੇਗਾਨੀ ਧੀ ਹੈ। ਉਸਨੇ ਭਾਰਤੀ ਸਮਾਜ ਵਿੱਚ ਕੁੜੀਆਂ ਨਾਲ ਹੋ ਕੇ ਵਿਤਕਰੇ, ਅਨਿਆਂ ਤੇ ਧੱਕੇ ਦਾ ਜਿਤਕ ਕੀਤਾ ਹੈ। ਕਵਿਤਰੀ ਚਾਹੰਦੀ ਹੈ ਕਿ ਕੜੀਆਂ ਵਿਰੱਧ ਰਵੱਈਆ ਬੰਦ ਹੋਣਾ ਚਾਹੀਦਾ ਹੈ।

CO7 ਦਰਸ਼ਨ ਬੁਲੰਦਵੀ- ਕਵੀ ਅਨੁਸਾਰ ਮਨੁੱਖ ਆਪਣੇ ਪਿਛੋਕੜ ਨਾਲੋਂ ਟੁੱਟਦਾ ਜਾ ਰਿਹਾ ਹੈ ਤੇ ਵਿਛੋੜੇ ਦੀ ਜ਼ਹਿਰ ਨੂੰ ਲਗਾਤਾਰ ਪੀਂਦਾ ਹੈ। ਜੀਵਨ ਜਿਊਣ ਅਤੇ ਲੋੜਾਂ ਪੂਰੀਆਂ ਕਰਨ ਲਈ ਸਦੀਵੀ ਸੰਘਰਸ਼ ਕਰਦਾ ਹੈ। ਇਨਾਂ ਸੰਦਾਂ ਨਾਲ ਸਖਤ ਮਿਹਨਤ ਕਰਦਾ ਹੋਇਆ ਮਨੁੱਖ ਪਿੱਠ ਉੱਤੇ ਆਪਣੇ ਜਿਊਣ ਦਾ ਭਾਰ ਚੁੱਕੀ ਫਿਰਦਾ ਹੈ। ਇਹਨਾਂ ਸਥਿਤੀਆਂ ਤੋਂ ਛੁਟਕਾਰਾ ਪਾਉਣਾ ਸੌਖਾ ਨਹੀਂ ਹੁੰਦਾ ਤੇ ਉਹ ਦਿਨੋ ਦਿਨ ਪਿੰਜਰੇ ਵਿੱਚ ਘੁੱਟਿਆ ਜਾਂਦਾ ਹੈ। ਕੰਮ ਵਾਲੇ ਹੱਥ ਵਗਦੇ ਪਾਣੀ ਉਪਰ ਲਿੱਖ ਕੇ ਇਤਿਹਾਸ ਰਚਾ ਦਿੰਦੇ ਹਨ।

CO8 ਜਸਵਿੰਦਰ- ਕਵੀ ਅਨੁਸਾਰ ਉਸਨੇ ਸੌ ਮੁਖੌਟੇ ਪਹਿਨ ਕੇ ਪਾਰਦਰਸ਼ੀ ਰਹਿਣ ਦੇ ਜਿੰਨੇ ਦੁੱਖ ਜਰੇ ਹਨ, ਉਹ ਹੀ ਜਾਣਦਾ ਹੈ। ਜਿੰਦਗੀ ਖੁਸ਼ੀਆਂ ਤੇ ਗਮੀਆਂ ਦਾ ਸੁਮੇਲ ਹੈ। ਅਸਲ ਵਿੱਚ ਉਹ ਪੱਤੇ ਸਮਾਨ ਹੈ, ਉਹ ਔੜਾਂ ਤੋਂ ਵੀਡਰਦਾ ਹੈ ਤੇ ਮੀਹਾਂ ਤੋਂ ਵੀ। ਸਮਾਜ ਇਕ ਮਾਰੂਥਲ ਹੈ ਦੂਜੋ ਪਾਸੇ ਪ੍ਰੇਮਿਕਾ ਰੂਪ ਇਕੱਲੀ ਨਦੀ ਹੈ। ਮਨੁੱਖ ਜਿਧਰ ਵੀ ਤੁਰਦੇ ਹਨ ਬਹਿਸਾਂ ਕਰਦੇ ਹਨ ਪਰ ਕਿਸੇ ਦਿਲ ਵਿੱਚ ਮੋਹ ਦੇ ਬੀਜ ਨਹੀਂ ਬੀਜਦੇ ਸਗੋਂ ਗੁਆ ਕੇ ਹੀ ਆਉਂਦੇ ਹਨ। ਕੋਈ ਕ੍ਰਾਂਤੀਕਾਰੀ ਹੀਲਾ ਹੀ ਇਸ ਸਥਿਤੀ ਤੋਂ ਛੱਟਕਾਰਾ ਪਆ ਸਕਦਾ ਹੈ।

CO9 ਸੁਖਪਾਲ- ਕਵੀ ਅਨੁਸਾਰ ਦੀਵੇ ਦੇ ਬਲਣ ਨਾਲ ਅੰਦਰ ਚਾਨਣਾ ਹੁੰਦਾ ਹੈ ਪ੍ਰੰਤੂ ਉਹ ਬਾਹਰ ਨੂੰ ਤੁਰ ਪੈਂਦਾ ਹੈ। ਬੁੱਲਾਂ ਵਿੱਚੋਂ ਦੀਵੇ ਦੀ ਸਲਾਮਤੀ ਲਈ ਅਰਦਾਸ ਨਿਕਲਦੀ ਹੈ। ਅਸੀਂ ਲੋਕਾਂ ਨੇ ਜਾਣ-ਬੁੱਝ ਕੇ ਆਪਣੇ ਆਪ ਨੂੰ ਛੋਟਾ ਕਰ ਲਿਆ ਕਿ ਪੱਛਮੀ ਲੋਕ ਸਾਡੇ ਤੋਂ ਵੱਡੇ ਹਨ। ਇਕ ਮਾਂ ਹੀ ਹੈ ਜੋ ਕਿ ਸਾਡੀ ਹਰ ਲੋੜ ਨੂੰ ਬਿਨਾਂ ਦੱਸਿਆਂ ਸਮਝਦੀ ਹੈ। ਕਵੀ ਦੇ ਚਿੱਤੇ ਲੋਕਾਂ ਨੂੰ ਵੀ ਗਿਆਨ ਦੇਣ ਦੀ ਕੋਸ਼ਿਸ਼ ਕਰਦਾ ਹੈ। ਕਵੀ ਪੰਜ ਤੱਤਾਂ ਤੋਂ ਇਲਾਵਾ ਛੇਵੇ ਤੱਤ ਦੀ ਭਾਲ ਵਿੱਚ ਹੈ।

CO1: ਇਸ ਨਾਵਲ ਦਾ ਵਿਸ਼ਾ ਜਿਥੇ ਡਾ. ਸਲੀਮ ਵਰਗੇ ਨੌਜਵਾਨਾਂ ਦੇ ਮਨਾਂ ਵੀਂਚ ਆਪਣੇ ਦੇਸ਼ ਖਾਸ ਕਰਕੇ ਪੇਂਡੂ ਲੋਕਾਂ ਤੇ ਇਥੋਂ ਦੀਆਂ ਕੁੜੀਆਂ ਲਈ ਨਫਰਤ ਅਤੇ ਪੱਛਮੀ ਦੇਸ਼ਾਂ ਦੀ ਅਮੀਰੀ ਤੇ ਨੀਲੀਆਂ ਅੱਖਾਂ ਵਾਲੀਆਂ ਗੋਰੀਆਂ ਕੁੜੀਆਂ ਲਈ ਖੀਂਚ ਦੇ ਖੋਖਲੇਪਨ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਹੈ।

CO2 ਇਸ ਨਾਵਲ ਵੀੱਚ ਪਾਕਸਿਤਾਨੀ ਸਮਾਜ ਦੇ ਪ੍ਰਬੰਧ, ਨੌਜਵਾਨਾਂ ਦੀਆਂ ਭਾਵਨਾਵਾਂ, ਜਾਗੀਰਦਾਰੀ ਪ੍ਰੰਬਧ ਔਰਤਾਂ ਦੀ ਬੇਕਦਰੀ ਭਰੀ ਸਥਤਿੀ, ਆਮ ਲੋਕਾਂ ਦੇ ਸ਼ੋਸ਼ਣ ਅਤੇ ਪਾਕਸਿਤਾਨ ਦੇ ਆਮ ਪੇਂਡੂ ਜੀਵਨ ਦੇ ਯਥਾਰਥਕ, ਮਨੋਵਗਿਆਿਨਕ ਤੇ ਸਜੀਵ ਝਲਕ ਨੂੰ ਪੇਸ਼ ਕਰਦਾ ਹੈ।

CO3 ਇਸ ਨਾਵਲ ਦੀ ਲੇਖਕਿਾ ਦੇ ਇਸ ਨਾਵਲ ਦੇ ਉਦੇਸ਼ ਬਾਰੇ ਸਪਸ਼ਟ ਹੁੰਦਾ ਹੈ ਕਿ ਨੌਜਾਵਾਨਾਂ ਦੇ ਮਨਾਂ ਵੀੱਚ ਪੇਂਡੂ ਲੋਕਾਂ ਦੇ ਜੀਵਨ ਤੇ ਸੂਝ-ਬੂਝ ਬਾਰੇ ਤ੍ਰਸਿਕਾਰ ਦੀ ਭਾਵਨਾ ਭਰੀ ਹੋਈ ਹੈ।ਸਦੀਕਾ ਤੇ ਜ਼ਰੀਨਾ ਵਰਗੀ ਵਫਾਦਾਰੀ ਤੇ ਕੁਰਬਾਨੀ ਦੀ ਭਾਵਨਾ ਬਲਿਕੁਲ ਨਹੀਂ ਹੁੰਦੀ।ਇਸ ਕਰਕੇ ਨੌਜਵਾਨਾਂ ਨੂੰ ਪੱਛਮੀ ਦੇਸ਼ਾਂ ਦੀ ਚਕਾਚੌਂਧ ਤੇ ਕੁੜੀਆਂ ਪੱਛਿ ਨਹੀਂ ਭੱਜਣਾ ਚਾਹੀਦਾ।

CO4 ਇਸ ਨਾਵਲ ਦਾ ਕਥਾਨਕ ਪਾਕਸਿਤਾਨ ਦੇ ਸਮਾਜਕਿ ਜੀਵਨ ਵੀਂਚੋ ਲਿਆ ਗਿਆ ਹੈ। ਇਸ ਵਿੱਚ ਵਾਪਰਨ ਵਾਲੀਆਂ ਘਟਨਾਵਾਂ ਬੜੀਆਂ ਯਥਾਰਥਕ ਤੇ ਕਦਰਤੀ ਹਨ। ਇਹ ਸਾਰੀਆਂ ਘਟਨਾਵਾਂ ਚਾਰ ਕ ਮਹੀਨਆਂ ਵੱਚਿ ਵਾਪਰਦੀਆਂ ਹਨ। CO5 ਇਸ ਨਾਵਲ ਦੇ ਪਾਤਰ ਪਾਕਸਿਤਾਨ ਦੇ ਆਮ ਪੇਂਡੂ ਸਮਾਜਕਿ ਨਾਵਲ 'ਬਲਦੇ ਜੀਵਨ ਵੀੱਚ ਲਏ ਗਏ ਹਨ. ਇਹ ਸਾਰੇ ਪਾਤਰ ਕਦਰਤੀ ਤੇ ਜਿਉਂਦੇ ਦੀਵੇਂ ਜਾਗਦੇ ਹਨ। ਚਰਤਿਰ ਚਤਿਰਨ ਲਈ ਲੇਖਕਿਾ ਨੇ ਕਾਫੀ ਮਨੋਵਗਿਆਿਨਕ ਸੂਝ ਬੂਝ ਤੋਂ ਕੰਮ ਲੀਆ ਹੈ ਤੇ ਇਨਾਂ ਦੀ ਆਪਸੀ ਲੇਖਕਾਿ-ਰਜੀਆ ਵਾਰਤਾਲਪ ਬੜੀ ਪਰਭਾਵਸ਼ਾਲੀ ਹੈ। ਇਹ ਨਾਵਲ ਪੜਹਨ ਨਾਲ ਨੂਰ ਮੁਹੰਮਦ ਵਦਿਆਿਰਥੀਆਂ ਨੂੰ ਪੂਰਬੀ ਤੇ ਪੱਛਮੀ ਪੰਜਾਬ ਦੀ ਕਾਫੀ ਸੋਝੀ ਹੁੰਦੀ ਹੈ। CO6 ਇਸ ਨਾਵਲ ਦੀ ਕਹਾਣੀ ਨੀੱਕੇ ਨੀੱਕੇ, ਭਾਵਪੂਰਕ, ਸੁਆਦਲੇ ਤੇ ਰਸ ਭਰੇ ਵਾਰਤਾਲਾਪਾਂ ਨਾਲ ਭਰਪੂਰ ਹੈ। ਵਦਿਆਿਰਥੀ ਇਸ ਵਾਰਤਾਲਾਪ ਰਾਹੀ ਯਥਾਰਥ, ਮਨੋਵਗਿਆਿਨ ਤੇ ਰੂਮਾਂਸ ਭਰੇ ਵਾਕਾਂ ਨੂੰ ਖੂਬ ਮਾਣਦੇ ਹਨ। CO7 ਇਸ ਨਾਵਲ ਦੀ ਭਾਸ਼ਾ ਸ਼ੈਲੀ ਬੜੀ ਸਰਲ,ਸਾਦੀ ਤੇ ਮਨੋਵਗਿਆਿਨਕ ਹੈ। ਸ਼ੈਲੀ ਮੁੱਖ ਤੌਰ ਤੇ ਬਆਿਨੀਆ ਵੀ ਹੈ, ਪਰ ਉਸ ਵੱਚਿ ਵਰਨਣੀ ਤੇ ਨਾਟਕੀ ਅੰਸ ਵੀ ਹੈ। CO8 ਇਸ ਨਾਵਲ ਦਾ ਸਰਿਲੇਖ 'ਬਲਦੇ ਦੀਵੇ' ਢੱਕਵਾਂ ਤੇ ਫੱਬਵਾਂ ਹੈ। ਇਸ ਦਾ ਸਰਿਲੇਖ ਇਸਦੇ ੳਦੇਸ਼ ੳੱਤੇ ਅਧਾਰਤਿ ਹੈ। ਸਾਹਤਿਕਿ ਦਰਸ਼ਿਟੀਕੋਣ ਤੋਂ ਨਾਵਲ ਲੇਖਕਿਾ ਦੀ ਇਹ ਰਚਨਾ ਪਾਕਸਿਤਾਨੀ ਨਾਵਲ ਸਾਹਤਿ ਵੀਂਚ ਇਕ ਵਲਿੱਖਣ ਪ੍ਰਾਪਤੀ ਹੈ। CO1: ਪੰਜਾਬੀ ਸਾਹਤਿ ਦੇ ਇਤਹਾਿਸ ਦੀ ਮਢਲੀ ਜਾਣਕਾਰੀ, ਆਧਨਕਿ ਕਾਲ 1901 ਈ:ਤੋਂ ਹਣ ਤੱਕ ਦੇ ਇਤਹਾਸ ਦੀ ਜਾਣਕਾਰੀ ਵਦਿਆਿਰਥੀ ਨਾਲ ਸਾਂਝੀ ਕੀਤੀ CO2 ਪੰਜਾਬੀ ਗਲਪ ਦੇ ਜਨਮ ਤੇ ਵਿਕਾਸ, ਕਾਵਲ ਤੇ ਕਹਾਣੀ ਆਧਨਕਿ ਸਾਹਤਿਕ ਚੇਤਕਤਾ ਪੱਛਮੀ ਸਾਹਤਿ ਦੇ ਪ੍ਰਭਾਵਾਂ ਦੀ ਉਪਜ ਹੈ। ਭਾਈ ਵੀਰ ਸੰਘਿ ਪੰਜਾਬੀ ਨਾਵਲ ਦੇ ਜਨਮ ਦਾਤਾਂ ਹਨ, ਬਾਰੇ ਵਦਿਆਰਆਂ ਨੂੰ ਨਾਵਲ ਤੇ ਕਹਾਣੀ ਪੜਹਨ ਦੀ ਲਗਨ ਪੈਦਾਂ ਕੀਤੀ। Translation in English CO1: Pash presents his rebellious thoughts through the medium of signs and symbols. His life experience creates new understanding in the community. He presents imperialism in its real form and he does not want to wrap the life and

happiness which is crushed under coercion,

	oppression, injustice, false promises and dreams.
	CO2: In addition to the patriotism, Sant Ram Udasi has
	expressed the desire to end the exploitation of
ਪੰਜਾਬੀ ਸਾਹਤਿ	capitalism and feudalism. The poet exhorts the
ਦਾ ਇਤਹਾਿਸ	farmers to unite and fight for their rights and
(1901-2000)	expressing a revolutionary sentiment he
	describes the plight of the poor hard-working
	people. He inspires them to protect the sweet
	fruits of his labour.
	CO3: Sarjit Patar- Poet advises a person that instead of
	living a life of loyalty and promises, he has to
	live a life full of devotion. Describing the
Nakash	feelings of the mother, he tells that the mother
Nuhar	keeps the papers of her son close to her chest.
Poetry	CO4: Jaswant Deed- Poet tries to tell that all
Book	relationships that include parents, girlfriend and
	wife etc. have faded for a present man in front
	self-centred life. The poet refrains from
	presenting the truth while portraying an
	unbalanced life. He expresses his unhappiness
	for the society that is tied to rituals and
	superstitions by ancestors and tries to liberate
	the next generations from it.
	CO5: Navtej Bharti - The poet prepares a man that he
	Should keep walking, watching and loving
	others. The poet presents the unsatisfied mental
	state of man. He always wanted to be a bird. He
	asks God for words of human love and
	reconciliation.
	CO6: Sukhwinder Amrit- The poetess says that when
	Her worldly debate had not stopped, she stopped
	talking. She prefers death than turning away and
	breaking the promise. She says that she remains
	a foreigner because when she was in her
	paternal house she was considered stranger and
	today she lives in her in-law's house but the

- situation has not changed. She discusses the injustice and discrimination meted out to women in the Indian society. Poetess wants that this sort of attitude against girls should come to end.
- CO7: Darshan Bulandavi- According to the poet, man is getting separated from his background and continuously drinks the poison of separation. He wages eternal struggle to live life and fulfill his needs. Man roams around carrying the weight of his life on his back. It is not easy to get rid of these situations and he feels choked and suffocated in a cage every day. Hard-working people create history by writing on water.
- CO8: Jaswinder- According to poet, only he knows the pains he has endured by wearing a hundred masks to remain transparent. Life is a combination/mixture of happiness and sorrows. In fact, he is like a leaf, he is afraid of droughts and heavy rainfall. Society is a desert and on the other side there is a lonely river in the form of a girlfriend. People argue wherever they go, but they do not sow the seeds of attachment in any heart, rather they return after losing everything. Only a revolutionary effort can get rid of this situation.
- CO9: Sukhpal- According to the poet, when the lamp is lit, there is light inside, but it goes outside. Lips pray for the safety of the lamp. We have deliberately depreciated ourselves by thinking that Westerners are superior to us. Mother is the only one who understands our every need without expressing it. The poet also tries to give knowledge to the double-minded people. Apart from the five elements, the poet is in search of the sixth element.

English

literature.	
CO2: read, analyze and write about a text	
independently.	
CO3: show skills to write clearly, coherently, and	
cohesively.	
CO4: detect errors and correct them.	
CO5: do paragraph writing for effective English	
Writing.	
CO6: use grammar and English communication ski	ls
accurately in various contexts.	
Hindi	
r विद्यार्थी मीराबाई के जीवन, रचनाओं, काव्यगत विशेषताओं	और
दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।	
r विद्यार्थी मीराबाई के पदों यह सीखेंगे कि अपने आराध्य	ा की
भिक्त के लिए प्रेम और विशुद्ध मन की आवश्यकता होती ह	। वे
यह समझेंगे कि ईश्वर भक्त के मन की भावना को देखकर उ	प़ पर
अपना प्रेम बरसाता है। ईश्वर को प्राप्त करने के लिए स	मर्पण
परमावश्यक है।	
r विद्यार्थी तुलसीदास के जीवन, रचनाओं, काव्यगत विशेष	ताओं
और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।	
	-
r विद्यार्थी तुलसीदास की रचनाओं के माध्यम से उनकी राम	
से परिचय प्राप्त करेंगे। विद्यार्थी तुलसीदास की रचनाओ	
माध्यम से विविध मानवीय मूल्यों और नीति-आदर्शों का ज्ञान	
करेंगे। तुलसी के राम के सुखी और सहज जीवन जीने की क	ना स
विद्यार्थी परिचित होकर लाभ प्राप्त करेंगे।	
r विद्यार्थी गिरिधर राय के जीवन, रचनाओं, काव्यगत विशेष	ताओं
और टार्शनिक सिंदर्शांतों का परिचय पात करेंगे।	
कवितालोक (काव्य-पुस्तक)	
r मीरा बाई	ोति
और लोक व्यवहार सीखर्न का प्रयास करेंगे। लोक-व्यवहार औ	
नीतिपरक लोक-परम्पराओं का ज्ञान प्राप्त करके विद्यार्थी सहर	

		जीवन जीने की कला सीख पाएंगे।
	r तुलसीदास	
	गिरिधर कविराय	r विद्यार्थी उपन्यास के माध्यम से समाज और जीवन की विविध
r	ागारवर कावराव	समस्याओं से अवगत होंगे और उन समस्याओं के समाधान के लिए
		प्रेरित होंगे। उनमें समस्या-समाधान की क्षमता विकसित होगी।
		r झांसी की रानी उपन्यास श्री वृन्दावन लाल वर्मा का एक
		ऐतिहासिक उपन्यास है। विद्यार्थी क्त्भ्स्त्र के स्वतंत्रता संग्राम की
		प्रसिद्ध वीरांगणा लक्ष्मीबाई की चारित्रिक विशेषताओं का ज्ञान प्राप्त
		 करने के साथ-साथ उन परिस्थितियों का ज्ञान भी प्राप्त करेंगे जिनके
		 कारण यह संग्राम विफल होकर पूरी तरह अंग्रेजों के अधीन हो गया
		था।
		r विद्यार्थी इसके माध्यम से फल/परिणाम की चिन्ता किये बिना कर्म
		का महत्व जान पाएंगे। विद्यार्थी यह जान पाएंगे कि योजनाबद्ध
		कार्य के द्वारा ही लक्ष्य को प्राप्त किया जा सकता है।
		r विद्यार्थी यह जान पाएंगे कि कैसे सीमित साधनों के होते हुए भी
		उन साधनों का समयानुकूल उपयोग आपके श्रम को सफल बना
		सकता है। वे समझ पाएंगे कि एकता की ताकत किसी भी कार्य को
		सरल–सुगम बना सकती है।
		r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे।
		मान्यूनाचा वित्या (मावरच का शतकारा का वार्यच प्राची कार्या
		r विद्यार्थी हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक
		,
	झांसी की रानी	प्रवृतियों को समझने में सक्षम होंगे।
	•	frame
	(उपन्यास)	r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन
		को समझने का प्रयास करेंगे।
		r भिक्तकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक
		परिस्थितियों, साहित्यिक प्रवृतियों, कबीर, नानक, जायसी, सूरदास,
		तुलसीदास, मीरा आदि संत-भक्त कवियों की रचनाओं से परिचित
		होकर विद्यार्थी भिक्तकाल के साहित्य के विषय में समुचित ज्ञान

	प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे।
	r हिन्दी उपन्यास विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा।
हिन्दी साहित्य का इतिहास r भिरतकाल	r हिन्दी उपन्यास की परिभाषा, उपन्यास के विविध तत्व और उपन्यास के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।
	r शुद्ध भाषा लिखने एक कला है। अतः यह आवश्यक है कि प्रत्येक वाक्य को शुद्ध रूप में पढ़ा/लिखा जाए। उसके लिए व्याकरण का ज्ञान और अत्त्यास परमावश्यक है।
	r विद्यार्थी मुहावरे/लोकोक्तियों के ज्ञान और अत्यास से यह जान पाएंगे कि कैसे कोई वाvयाँश सामान्य अर्थ के स्थान पर विशेष अर्थ का बोध करता है। इनके उचित प्रयोग से भाषा को प्रभावशाली बनाया जा सकता है।
	r अनुच्छेद और निजी पत्र-लेखन से विद्यार्थी अपने लेखन-कौशल को निखार सकेंगे और भविष्य में इस कौशल को वे अपने व्यावसायिक जीवन में इस्तेमाल कर पाएंगे।
समीक्षा सिद्धांत r हिन्दी उपन्यास	r पारिभाषिक शब्दावली का ज्ञान प्राप्त कर विद्यार्थी यह जान पाएंगे कि विविध कार्यालयों में हिन्दी की पारिभाषिक शब्दावली का सटीक प्रयोग कैसे किया जाता है और इसकी आवश्यक्ता एवं उपयोगिता क्या है।
व्यावहारिक व्याकरण	

	r मुहावरे/लोकोिvतयां	
	r अनुच्छेद लेखन	
	r निजी पत्र-लेखन	
	r पारिभाषिक शब्दावली	

0105	History	
0125	(History of India	After completion of this course, the students will be
	1200-1750 A.D)	able to:
		CO1: explain about the establishment of Turkish rule
		Under Muizzuddin of Ghor, Consolidation under
		Iltutmish and Balban.
		CO2: describe about the Khalji Dynasty, their
		administration, Agrarian and market reforms of Alauddin Khilji.
		CO3: explain about the Tughlaqs i.e. Muhammad Bin
		Tughlaq's administrative experiments and its
		impact, Feroz Shah Tughlaq's administrative and
		economic reforms.
		CO4: state the Vijaynagar Kingdom, it's establishment,
		Administration and Economics.
		CO5: state the Formation of the Mughal Empire, it's
		Political condition of India on the eve of Babur's
		Invasion conquests and Courses of his Success.
		CO6: describe about the Afghans, establishment of

		Afghan power under Sher Shah Suri,
		administrative reforms.
		CO7: explain about the Central, Provincial
		Administration and land revenue system of the
		Mughal period Mansabdari system and Jagirdari
		System.
		CO8: explain about the Decline of the Mughal Empire.
		CO9: explain about the Rise of the Marathas, conquests
		of Shivaji and his administration.
		CO10: describe about Evolution and main features of
		Bhakti movement and Sufism.
		CO11: state the Important historical places of medieval
		India, Extent of Empire under Alauddin
		Khalji and Mughal Empire in 1707.
	Mathematics	
MAT-0145	(Solid Geometry)	After completing the course, students will be able
		to:
		CO1: describe the concept of transformation of
		axes in three dimensions.
		CO2: analyze Sphere and its properties, power of
		point with respect to Sphere, coaxial family of
		spheres, limiting points.
		CO3: differentiate Cylinder, Ellipse, Parabola,
		Hyperbolic Cylinder and Enveloping cylinder and
		their various properties.
		CO4: describe Cone, homogeneous equation of
		Second degree in three variables, Right Circular
		and Enveloping cones.
		CO5: solve problems regarding Paraboloids, plane
		sections of conicoids, generating lines and
		reduction of second degree equations.
MAT-0146	(Calculus-II)	After completing the course, students will be able
		to:
		CO1: demonstrate concepts of Concavity, Convexity,
		Points of Inflexion and Asymptotes.

		CO2: analyze Curvature and Radius of Curvature in
		Polar and Cartesian coordinates.
		CO3: solve problems regarding the concept of Evolute,
		Involute and Chord of Curvature.
		CO4: analyze and find Integral of Hyperbolic and
		Inverse Hyperbolic Functions.
		CO5: find out the integration of functions using
		Trapezoidal, Simpson and Prismoidal rules.
		CO6: differentiate the concepts of Summation of
		Series, Quadrature, Rectification, Volumes and
		Surfaces of Solids of Revolution.
MAT-0147	(Theory of Equations)	After completing the course, students will be able
		to:
		CO1: apply Euclid Algorithm, synthetic division.
		CO2: describe the relationship between Roots and
		Coefficients of Equations using Virge Vieta
		method.
		CO3: describe the concept of Transformation of
		Matrices, calculate number of Real and Complex
		roots using Descarte's rule of signs.
		CO4: find the Solutions of Cubic equations by using
		Cardon Method and Biquadratic equations by
		using Descarte and Ferrari method.
	Agriculture	
0115	(Agricultural Economics	After the course, the students will be able to:
	and Agronomy)	CO1: explain about agricultural banking, agricultural
		loans – Its various types, repayment mode, form
		filling for agricultural loans.
		CO2: explain about National policy for agricultural
		loans.
		CO3: state about the agriculture credit cards.
		CO4: state the fundamentals of land measurements and
		land revenue.
		CO5: explain about various legal aspects of import and

		CO6: explain about quarantine laws.
		CO7: describe the fundamentals of agricultural
		Economics, Psychological pressure on farmer
		and villagers of different classes.
		CO8: get skilled in the methods of storage of
		vegetables, fruits, grains at local and large level.
		Vegetable and fruit preservation.
		CO9: read about soil types, management, improvement
		and amendments.
		CO10: explain about the soil testing. Fundamental of
		fertilizers and manures, Important fertilizers
		and their uses and Nitrogen fixation.
0195	Retail Marketing	The students who successfully complete this course will be able to:
		CO1: identify the core concepts of marketing and
		understand the needs of the customer.
		CO2: apply the company orientation towards the
		market and also evaluate the market.
		CO3: analyze and categorize segmentation, targeting
		and positioning of the product and the consumer.
		CO4: explain what marketing means to business
		executives and academics.
		CO5: analyze the consumer behavior and can
		recognize the different steps in buying decision
		process.
		CO6: apply the essentials for successful implementation
		of service management.
	Computer Science	
CS03	(Operating System Concepts)	The students after completing this course, will be able to:
		CO1: explain how Operating System is important for
		Computer System.
		CO2: describe the different types of Operating System
		and their services.
		CO3: explain the process management, concurrent
		33

		processes and threads.
		CO4: handle deadlock and work on it.
	(C Programming)	CO5: describe about Memory Management: Logical and
		Physical memory, Segmentation, various
CS04		paging algorithms.
CS04		The students after completing this course, will be able to:
		CO1: explain the basic terminology used in computer
		Programming.
		CO2: write, compile and debug programs in C language
		CO3: use different data types in a computer program
		CO4: design programs involving decision structures,
		loops, arrays and strings.
		CO5: describe about the various types of Functions and
		String handling mechanisms.
		CO6: explain the difference between call by value and
PCS02	(Practical Based on Paper CS04)	call by reference.
PCS02		The students after completing this course, will be able to:
		CO1: read, understand and trace the execution of
		programs written in C language.
		CO2: implement programs using operators, data types,
		Decision, Loop, Case Control Statements.
		CO3: design programs involving arrays, strings,
		pointers, functions and implement the dynamics
		of memory by the use of pointers
0138	Physical Education	After the course, students will be able to:
		CO1: describe about Anatomy and Physiology of
		human body.
		CO2: explain about different body parts, its mechanism
		and its developing exercises.
		CO3: follow the proper Rules, Judgment and Skills of
		Track and Field events.
		CO4: maintain proper Health and active life style and
		know about Health problems in India.

		CO5: use the different therapy processes.
		CO6: apply first aid.
		CO7: describe about components of physical
		education.
		CO8: describe about Olympic, Asians and Common
		Wealth games.
	Fashion Designing	
0179	(Fabric Study and Design Concept)	After the course the students will be able to:
		CO1: describe about Fibers and their properties.
		CO2: explain about yarn size and properties.
		CO3: explain about the concept of Principles and
		Elements of art
		CO4: get skilled in different dyes and printing
		techniques.
	(Basic Construction	CO1: get skilled in various seams and seams finishes.
	Techniques and Sketching Practical for	CO2: do fancy and traditional embroidery stitches.
	Sem 1 and 2 annual)	CO 3: figure sketching.
		CO 4: draft and construct garments.
	Economics	
0118	(Macro Economics)	After completing this course, students will be able to:
		CO1: explain the macro approach to the economy.
		CO2: recall the theory of trade cycles and different
		phases of trade cycles.
		CO3: analyze the theory of employment, multiplier and
		acceleration.
		CO4: describe the theory of trade cycle, and explain
		various phases of trade cycle.
		CO5: State the Concept of inflation, deflation and
		stagflation.
		CO6: explain the working of money market, banking
		and financial system.
		CO7: describe economic planning, RBI and functions
		of
		RBI, various tools of monetary policy and fiscal

		policy.
		CO8: differentiate the role of commercial banks and
		central bank in Indian economy.
		CO9: distinguish monetary and fiscal policies and
		various tools used in these policies.
MUV0132	Music (Vocal)	On Completion of this course students would be able to:
		CO1: develop the ability to sing basic Alankaars, they
		will be introduced to Drut khayal and Vilambit
		khayal which is the most important and popular
		form of Hindustani Vocal Music.
		CO2: perform as an artist in Hindustani Music after
		having understood the basic concepts like Laya,
		Taal, Aalap, etc.
		CO3: observe great contribution of Pt. Vishnu
		Digambar Paluskar and they will be able to read
		and write compositions by studying notation
		system created by the legends.
		CO4: identify Musical terms like Study of Naad,
		knowledge of Bhatkhande Thaat system, Maatra,
		Avartan, Sam, Tali, Khali, Vibhag, Aroh and
		Avaroh.
0135	Political Science	
	(Political Theory II)	After the course, the students can:
		CO1: describe the concept of state, nation and civil society.
		CO2: explain the elements and factors of state and
		nation.
		CO3: explain the meaning sovereignty, types and
		characteristics.
		CO4: analyze critically the theories of monism and pluralism.
		CO5: explain about the origin of the concepts such as
		Law, power, authority, and legitimacy.
		CO6: state the forms of government in various
		CO6: state the forms of government in various

		countries and their working pattern. CO7: compare with procedure of various social institutions and government institutions. CO8: analyze the meaning of organs of government and theory of separation of power. SEMESTER-III PULSORY SUBJECTS
0201	English	After completion of this course, student will be able to: CO1: differentiate between the genres like poetry, story and essay. CO2: comprehend the poems critically. CO3: read the texts analytically like their themes, characters and situations. CO4: improve and develop his/her reading and writing skills through Note-making. CO5: write correct sentences through Punctuation and use of Non-finite verb.
0203/0204	Punjabi/History and Culture of Punjab	CO6: transform one type of sentence into other type of sentences through transformation of sentences. After Punjabi course, students can: CO1: 'ਪੰਜ-ਆਬ' ਪਾਠ-ਪੁਸਤਕ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬ ਦੇ ਵਿਰਸੇ ਦੀਆਂ ਡੂੰਘਾਈਆਂ ਨੂੰ ਬਹੁਤ ਨੇੜੇ ਤੋਂ ਪਛਾਨਣ ਅਤੇ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I ਵਿਦਿਆਰਥੀ ਲੋਕ-ਵਿਰਸੇ ਅਤੇ ਸਭਿਆਚਾਰ ਦੁਆਰਾ ਆਪਣੀਆਂ ਜੜ੍ਹਾਂ ਨਾਲ ਜੁੜਦੇ ਹਨ ਅਤੇ ਦੂਸਰਿਆਂ ਨੂੰ ਵੀ ਜੋੜਨ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ I CO2: ਦਫਤਰੀ, ਵਪਾਰਕ, ਸਮਾਜਿਕ ਅਤੇ ਸਭਿਆਚਾਰਕ ਮਸਲਿਆਂ ਬਾਰੇ ਚਿੱਠੀ-ਪੱਤਰ ਲਿਖਣ ਸਮੇਂ ਜਿਥੇ ਵਿਦਿਆਰਥੀ ਉਪਰੋਕਤ ਮਸਲਿਆਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ, ਉਥੇ ਲੋੜ ਪੈਣ ਤੇ ਅਜਿਹੇ ਮਸਲਿਆਂ ਦਾ ਹੱਲ ਕਰਨ ਸਮੇਂ ਕਿਸ ਅਧਿਕਾਰੀ ਤੱਕ ਪਹੁੰਚ ਕਰਨੀ ਹੈ ਆਦਿ ਬਾਰੇ ਜਾਣਕਾਰੀ ਗ੍ਰਹਿਣ ਕਰਦੇ ਹਨ I CO3: ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨਾਲ ਸੰਬੰਧਿਤ ਭਾਗ ਦਾ ਅਧਿਐਨ
		ਕਰਦੇ ਸਮੇਂ ਮਾਤ-ਭਾਸ਼ਾ ਪੰਜਾਬੀ ਦੇ ਨਿਕਾਸ, ਵਿਕਾਸ ਅਤੇ ਅਜੋਕੀ ਸਥਿਤੀ ਨੂੰ ਮਸਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਨਾਲ ਸੰਬੰਧ ਅਤੇ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਪੰਜਾਬੀ ਦੀ ਅਹਿਮੀਅਤ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ I ਇਸ ਤਰ੍ਹਾਂ ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਪੰਜਾਬੀ ਦੀ ਅਜੋਕੀ ਸਥਿਤੀ ਬਾਰੇ ਜਾਣਕਾਰੀ ਰਖਦੇ ਹੋਏ ਇਸ ਦੀ ਹੋਂਦ ਨੂੰ

ਬਚਾਈ ਰੱਖਣ ਲਈ ਯਤਨਸ਼ੀਲ ਰਹਿੰਦੇ ਹਨ l
CO4: ਵਿਆਕਰਣ ਦੀ ਸਿੱਖਿਆ ਪ੍ਰਾਪਤ ਕਰਨ/ਪੜ੍ਹਨ ਸਮੇਂ ਵਿਦਿਆਰਥੀ ਜਿਥੇ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਬਾਰੇ ਡੂੰਘਾਈ ਵਿਚ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ ਉੱਥੇ ਪੰਜਾਬੀ ਦੇ ਇਕ-ਇਕ ਸ਼ਬਦ ਦੇ ਪਿੱਛੇ ਅੰਦਰੂਨੀ ਨਿਯਮਾਂ ਦੇ ਕਾਰਜਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I ਭਾਸ਼ਾ ਦਾ ਇਕ-ਇਕ ਸ਼ਬਦ ਕਿਵੇਂ ਹੋਂਦ ਵਿਚ ਆਉਦਾ ਹੈ I ਫਿਰ ਸ਼ਬਦਾ ਤੋਂ ਵਾਕ, ਉਪਵਾਕ, ਪੈਰ੍ਹੇ ਅਤੇ ਫਿਰ ਸਮੁਚੀ ਰਚਨਾ ਕਿਵੇਂ ਤਿਆਰ ਹੁੰਦੀ ਹੈ I ਕਿਸੇ ਵੀ ਭਾਸ਼ਾ ਨੂੰ ਸਿੱਖਣ ਲਈ ਵਿਆਕਰਣ ਦੀ ਪੜ੍ਹਾਈ ਅਤੇ ਜ਼ਰੂਰੀ ਹੈ I
Punjabi Course outcomes translated into English
CO1: Through studying the Panj-Aab textbook, students
can get to know and understand the depth
of Punjabi culture and heritage of Punjab very
closely. Students connect with their roots through
heritage and culture and can connect with others.
CO2: While writing letters about office, commercial,
social, and cultural issues, where students can
understand the above issues, they acquire
information about which authority to approach
when solving such issues if necessary.
CO3: Students can understand the origin and
development of mother tongue Punjabi while
studying the section related to the Punjabi
language. They can understand the relationship of
the Punjabi language with other languages and the
importance of their mother tongue Punjabi. In this
way, the students keep trying to preserve the
existence of their mother tongue Punjabi while
keeping information about the current situation.
CO4: While learning/reading grammar, students gain in-
depth knowledge about their mother tongue, and
they also gain information about the functions of
internal rules behind each word of Punjabi. How
each word of the language comes into being.

		Then
		how are sentences, sub-sentences, paragraphs, and
		then the entire composition prepared from words?
		Studying grammar is essential for learning any
		language.
		History and Culture of Punjab
		After completion of this course, the students will be
		able to:
		CO1: explain about the first civilization of India i.e.
		Indus Valley Civilization.
		CO2: explain about Vedic Age, growth of Jainism and
		Buddhism in 6th century B.C. in Punjab.
		CO3: explain about the society and culture under
		Mauryas and Guptas.
		CO4: explain about Cultural Orientation i.e. Bhakti
		Movement of India.
		CO5: describe about the youngest religion of the world
		i.e. Sikhism from Shri Guru Nanak Dev Ji to all
		ten Gurus.
		CO6: explain about Martyrdoms in Sikhism.
		CO7: explain about institutional development in
		Sikhism, New policy adopted by Shri Guru
		Hargobind Sahib Ji and Creation of Khalsa.
		CO8: explain about changes in society in the 18th
		Century i,e. Social unrest, emergence of misls
		and institutions: Rakhi, Gurmata, Dal Khalsa.
		CO9: explain about society and culture of the people
		Under Maharaja Ranjit Singh.
		CO10: explain about the Physical geographical map of
		Punjab.
	ELE	CTIVE SUBJECTS
0209/0208/	Punjabi/Hindi/English	C01: 'ਮੁੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ ਰੰਗ' ਦੇ ਅਧਿਐਨ
0205		ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮੱਧਕਾਲ ਵਿੱਚ ਰਚੇ ਗਏ
		ਸਾਹਿਤ ਸੰਬੰਧੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ। ਉਨ੍ਹਾਂ ਵਿੱਚ

ਸਾਹਿਤ ਦੀਆ ਮੱਧਕਾਲੀ ਧਾਰਾਵਾਂ ਦੀਆ ਬਾਰੀਕੀਆਂ ਨੂੰ ਵਾਚਦੇ ਹੋਏ ਉਸ ਸਮੇਂ ਦੇ ਸਮਾਜ ਦੀਆ ਪ੍ਰਸਥਿਤੀਆ ਉਜਾਗਰ ਹੁੰਦੀਆ ਹਨ।

CO2: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ ਰੰਗ ਦੇ ਅਧਿਐਨ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ ਦੀ ਵਿਚਾਰਧਾਰਾ ਦੀ ਵਿਸਥਾਰਪੂਰਵਕ ਸੈਲੀ ਹੂੰਦੀ ਹੈ।ਉਸ ਸਮੇਂ ਦੇ ਸਮਾਜ ਵਿੱਚ ਫੈਲੀ ਰਾਜਨੀਤਕ ਹਨੇਰ ਗਰਦੀ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੁੰਦੀ ਹੈ। ਗੁਰੂ ਸਾਹਿਬਾਨ ਦੀ ਵਿਚਾਰਧਾਰਾ ਨਾਲ ਜੁੜਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀ ਭਗਤ ਕਬੀਰ ਜੀ ਅਤੇ ਭਗਤ ਰਵੀਦਾਸ ਜੀ ਬਾਰੇ ਵੀ ਜਾਣਕਾਰੀ ਹਾਸਲ ਕਰਦੇ ਹਨ। ਗੁਰਮਤਿ ਦੀ ਇਸ ਅਮ,ੀਰ ਪ੍ਰੰਪਰਾ ਦਾ ਅਧਿਐਨ ਕਰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀ ਨੈਤਿਕਤਾ ਦੇ ਧਾਰਨੀ ਬਣਦੇ ਹਨ।

CO3: 'ਦੁਨੀਆ ਇੱਕ ਮਹੱਲ ਹੈ' ਪੁਸਤਕ ਦੇ ਅਧਿਐਨ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਗੁਰਬਖਸ਼ ਸਿੰਘ ਦੇ ਸਫਰੀ ਜੀਵਨ ਬਾਰੇ ਸੌਝੀ ਹੁੰਦੀ ਹੈ। ਉਹ ਗੁਰਬਖਸ਼ ਸਿੰਘ ਦੇ ਸਫਰਨਾ, ਮੈਂ ਰਾਹੀਂ ਦੁਨੀਆਂ ਦੇ ਵੱਖ-ਵੱਖ ਸ਼ਹਿਰਾਂ ਨਾਲ ਆਪਣਾ ਨਾਤਾ ਜੋੜਦੇ ਹਨ। ਬਸਰਾ-ਬਗਦਾਦ ਤੋਂ ਸ਼ੁਰੂ ਹੋ ਕੇ ਅਮਰੀਕਾ,ਲੰਡਨ ਤੱਕ ਦੇ ਵੱਖ-ਵੱਖ ਦੇਸ਼ਾ ਦੀ ਯਾਤਰਾ ਕਰਦੇ ਹਨ। ਬਿਨਾਂ ਦੇਸ਼ਾਂ ਦੀਆਂ ਸੱਭਿਆਚਾਰ ਰੀਤਾਂ ਦੀ ਵਿਸ਼ਾਲਤਾ ਨੂੰ ਮਾਣਦੇ ਹੋਏ, ਇਨ੍ਹਾ ਦੇਸ਼ਾਂ ਦੀ ਸੁੰਦਰਤਾ ਨੂੰ ਵੇਖ ਕੇ ਉਪਣੇ ਅੰਦਰ ਦੀ ਸੁੰਦਰਤਾ ਦੇ ਬੀਜ ਬੀਜਦੇ ਹਨ ਅਤੇ ਸੱਭਿਆਚਾਰ ਮਨੁੱਖ ਬਣਨ ਦੀ ਲੋਚਾ ਕਰਦੇ ਹਨ। ਸੁੰਦਰਤਾ ਮਨੁੱਖ ਦੇ ਪਹਿਰਾਵੇਂ ਵਿੱਚ ਨਹੀਂ , ਉਸ ਦੇ ਵਿਚਾਰਾਂ ਵਿੱਚ ਹੋਣੀ ਚਾਹੀਦੀ ਹੈ। ਉਸਦੇ ਵਿਵਹਾਰ ਵਿੱਚ ਹੋਣੀ ਚਾਹੀਦੀ ਹੈ।

CO4: ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਗੁਰਮਤਿ ਕਾਵਿ ਅਤੇ ਭਗਤੀ ਕਾਵਿ ਵਾਲੇ ਸਾਹਿਤਕਾਰਾਂ ਸੰਬੰਧੀ ਅਤੇ ਉਨ੍ਹਾਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਸੰਬੰਧੀ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੁੰਦੀ ਹੈ। ਇਸ ਸਾਹਿਤ ਨੂੰ ਵਾਚਣ ਨਾਲ ਵਿਦਿਆਰਥੀਆਂ ਦੀਆਂ ਨੈਤਿਕ ਰੁਚੀਆਂ ਉਜਾਗਰ ਹੁੰਦੀਆਂ ਹਨ।ਉਸ ਸਮਾਜ ਦੀ ਉਸਾਰੀ ਲਈ ਆਪਣਾ ਯੋਗਦਾਨ ਪਾਉਂਦੇ ਹੋਏ ਉਸਾਰੂ ਕਾਰਜਾਂ ਵਿੱਚ ਆਪਣਾ ਰੋਲ ਨਿਭਾਉਂਦੇ ਹਨ।

CO5: ਭਾਰਤੀ ਕਾਵਿ-ਸ਼ਾਸਤਰ ਦਾ ਅਧਿਐਨ ਨਾਲ ਵਿਦਿਆਰਥੀਆ ਨੂੰ ਛੰਦ ਵਿਧਾਨ ਦੀ ਸੈਲੀ ਹੁੰਦੀ ਹੈ। ਕਵਿਤਾ ਰਚਣ ਲਈ ਛੰਦਾ-ਬੰਦੀ ਦਾ ਗਿਆਨ ਹੋਣਾ ਬਹੁਤ ਜ਼ਰੂਰੀ ਹੈ। ਰਸ ਸੰਪਰਦਾਇ ਦਾ ਗਿਆਨ ਹੋਣਾ ਬਹੁਤ ਜ਼ਰੂਰੀ ਹੈ। ਰਸ ਸਮਪਰਦਾਇ ਵਿਕ੍ਰੋਕਤੀ ਸੰਪਰਦਾਇ ਦਾ ਗਿਆਨ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਇਸ ਅਧਿਐਨ ਰਾਹੀਂ ਹੀ ਹੁੰਦਾ ਹੈ।

CO6: ਭਾਸ਼ਾ ਵਿਗਿਆਨ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆ ਨੂੰ ਭਾਸ਼ਾ ਦੇ ਟਕਸਾਲੀ ਰੂਪ ਅਤੇ ਇਸ ਦੀਆਂ ਉੱਪ-ਭਾਸ਼ਾਵਾਂ ਦਾ ਗਿਆਨ ਹੁੰਦਾ ਹੈ। ਭਾਸ਼ਾ ਵੰਨਗੀਆ ਦੀ ਵਰਤੋਂ ਬਾਰੇ ਵੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।

Punjabi course outcomes translated into English

- CO1: Through the study of medieval Punjabi poetry, the students get a detailed understanding of the ideology of Guru Nanak Dev Ji. They get information about the political darkness that spread in the society of that time. While connecting with the ideology of the Gurus, the students also learn about Bhagat Kabir Ji and Bhagat Ravidas Ji. By studying this rich tradition of Gurmat, the students become moral bearers.
- CO2: Through the study of the book 'Duniya Ek Mahal Hai' they can relate to different cities of the world through Gurbakhsh Singh's Safarnama .

 Starting from Basra-Baghdad, they travel to different countries from America to London.

 Enjoying the vastness of cultural customs of other countries, and seeing the beauty of these countries, they sow the seeds of their inner beauty and aspire to become cultured people.

 Beauty should not be in a man's dress but in his thoughts. should be in his behavior.
- CO3: Through the history of Punjabi literature, students get information about Gurmat poetry and Bhakti poetry writers and their works. By

	reading this literature, the moral interests of the
	students are revealed. They play their role in
	constructive activities while contributing to the
	construction of that society.
	CO4: A study of Indian poetics leads to a study of
	classics. Knowledge of rhyme is very important
	for composing poetry. It is very important to
	know the Rasa sect. students come to know
	about Rasa Sampardaya Vikrokati Sampardaya
	Vidyarthiya through this course.
	CO5: Through Linguistics the students know classical
	forms of language and its sub-dialects. There is
	also information about the use of language and
	language.
	Hindi
तरंगिणी	r विद्यार्थी मैथिलीशरण गुप्त के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
(काव्य-पुस्तक)	विश्वविद्याला जार प्रशानक सिष्वाता का बारवव श्रापा करना
, , , , , , , , , , , , , , , , , , ,	r विद्यार्थी मैथिलीशरण गुप्त की उद्बोधन, बन्दा-वैरागी, आर्य-
r मैथिलीशरण गुप्त	भाव, सिद्धार्थ और आ गया मेरा अंधेरा याम कविताओं का सार,
	व्याख्या और मूल-संवेदना को पढ़/समझ कर गुप्त जी के काव्य में
r जयशंकर प्रसाद	प्रतिपादित विभिन्न आदर्शों/मूल्यों को रेखांकित कर पाएंगे। गुप्त जी
पर्यकृतंत्र निपासी निपास	की राष्ट्रीय भावना से ओत-प्रोत कविताओं से सीख लेकर एक
r सूर्यकांत त्रिपाठी निराला	जिम्मेदार नागरिक बन पाएंगे।
r सुमित्रानंदन पंत	r विद्यार्थी जयशंकर प्रसाद के जीवन, रचनाओं, काव्यगत
	विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
	, ,
	r विद्यार्थी जयशंकर प्रसाद की रचनाओं जाग री, विषाद, आँसू,
	श्रद्धा और बढ़े चलो कविताओं के माध्यम से उनके छायावादी
	काव्य-आदशों से परिचय प्राप्त कर पाएंगे। प्रसाद जी की कविताओं
	के माध्यम से वे छायावादी काव्य की विलक्षणताओं से परिचय पा

सकेंगे।

- r विद्यार्थी सूर्यकांत त्रिपाठी निराला के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
- r विद्यार्थी सूर्यकांत त्रिपाठी निराला की मुक्ति, जुही की कली, सोचा किव ने, वीणा वादिनि वर दे और रानी और कानी किवताओं के माध्यम से उनकी वैविद्यमुखी काव्य-प्रतिभा से परिचय प्राप्त कर सकेंगे। किव की राष्ट्रीयता और सामाजिक प्रतिबद्धता से विद्यार्थी सीख लेंगे।
- r विद्यार्थी सुमित्रानंदन पंत के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
- r विद्यार्थी सुमित्रानंदन पंत की स्नेह चाहिए, जीवन-यान, तेरा कैसा गान, दो मित्र और वाचाल कविताओं के माध्यम से पंत जी के काव्य-सिद्धांतों और उनके प्रकृति प्रेम से परिचित होंगे। पंत जी ने अपनी कविताओं में निष्प्राण प्रकृति में प्राण-प्रतिष्ठा करके अद्भुत कार्य किया है।

मि. अभिमन्यु

(नाटक)

- r विद्यार्थी नाटक के माध्यम से समाज और जीवन की विविध समस्याओं से अवगत होंगे और उन समस्याओं के समाधान के लिए प्रेरित होंगे। उनमें समस्या-समाधान की क्षमता विकसित होगी।
- र नाटक के माध्यम से वर्तमान युग की विसंगतियों से विद्यार्थियों को परिचित करवाएगा। इस प्रतीकात्मक नाटक के माध्यम से विद्यार्थी पौराणिक और आज के अभिमन्यु के बुनियादी फर्क को समझ सकेंगे। जहां पौराणिक अभिमन्यु अनेक महारिथयों से घिरा हुआ और अपनी मृत्यु के विषय में जानते हुए भी उनसे जूझता है, वहीं आज का अभिमन्यु कलैक्टर राजन अपनी ईमानदारी और आदर्शवादिता को ताक पर रखकर नौकरशाही और भ्रष्ट राजतंत्र के चक्रव्यूह में फँस कर आत्म-समर्पण कर देता है और खुद को उस भ्रष्ट तंत्र का हिस्सा बना कर अपनी हार को स्वयं स्वीकार कर लेता है। विद्यार्थी इस तथ्य से अवगत होंगे कि आज की यही त्रासदी है कि हर ईमानदार व्यक्ति अंतत: भ्रष्ट तंत्र का हिस्सा बन जाता है अथवा मार दिया जाता है।

हिन्द	री साहित्य का इतिहास	
	r रीतिकाल	r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे। विद्यार्थी हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक प्रवृतियों को समझने में सक्षम होंगे।
		r विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे।
	समीक्षा सिद्धांत	r रीतिकाल की राजनैतिक, सामाजिक, धार्मिक, आर्थिक परिस्थितियों, साहित्यिक प्रवृतियों, रीतिबद्ध, रीतिमुक्त आदि काव्यधाराओं और केशव, बिहारी, घनानंद की रचनाओं से परिचित होकर विद्यार्थी रीतिकाल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे।
	r हिन्दी नाटक	
		r हिन्दी नाटक विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा।
	त्र्यावहारिक व्याकरण	r हिन्दी नाटक की परिभाषा, उपन्यास के विविध तत्व और उपन्यास के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।
r स	माकृति भिन्नार्थक शब्द	
	युग्म	r शुद्ध भाषा लिखने एक कला है। अत: यह आवश्यक है कि
r 5	स्वर और व्यंजन संधि	प्रत्येक वाक्य को शुद्ध रूप में पढ़ा/लिखा जाए। उसके लिए व्याकरण का ज्ञान और अत्त्यास परमावश्यक है।
	r संधि-विच्छेद	r विद्यार्थी एक जैसे दिखने वाले परन्तु भिन्न अथौँ वाले शब्दों का
	r वाvय-शुद्धि	अंतर और ज्ञान प्राप्त कर सकेंगे। इससे उनकी विश्लेषण क्षमता में वृद्धि होगी।
	r विराम चिह्न	r संधि और संधि-विच्छेद से विद्यार्थी शब्दों के मेल से नये शब्दों
r	तकनीकी शŽंदावली	के निर्माण की प्रक्रिया का ज्ञान प्राप्त कर सकेंगे।

		r वाvय शुद्धि का अत्त्यास करके विद्यार्थी भाषा को शुद्ध और व्याकरण-सम्मत लिखने में सक्षम हो पाएंगे।
		r विराम चिह्नों के अभाव में भाषा के भावों को सही तरीके से अभिव्यक्त करना कठिन हो जाता है, अतः भाव और विचारों की सही अभिव्यक्ति के लिए विराम चिह्नों का ज्ञान विद्यार्थियों के लिए अत्यंत उपयोगी होगा।
		r तकनीकी शब्दावली का ज्ञान प्राप्त कर विद्यार्थी यह जान पाएंगे कि विविध कार्यालयों में हिन्दी की पारिभाषिक शब्दावली का सटीक प्रयोग कैसे किया जाता है और इसकी आवश्यक्ता एवं उपयोगिता क्या है।
		English
		After completion of this course, the student will be able to:
		CO1: enhance their knowledge in different literary
		tradition, genres, literary movements and styles
		CO2: relate to various literary aspects through the texts
		which capacitate them to enrich their literary,
		research and cultural values and make them
		aware of self and society.
		CO3: describe the various forms of figures of speech
		and classify a detailed study of literary devices.
		CO4: comprehend extensive knowledge of english as
		language in its various textual forms and
		construct them to be creative, thoughtful and effective communicator.
		CO5: classify different types of dialogue writing.
0224	History	
0224	(History of India	After completion of this course, the students will be
	1750-1964 A.D)	able to:
		CO1: explain the broad development in the history of India in modern times.
		CO2: explain about Founder of British Rule,
		Circumstances leading to the battles of

		Plassey and Buxar and their significance,
		Reference of Warren Hastings.
		CO3: describe about Administrative Reforms under
		Cornwallis, William Bentinck and Dalhousie.
		CO4: explain about the uprising of 1857, Political,
		Socio-religions, economic and immediate
		clauses, failure and results of uprising.
		CO5: explain about Economic changes, British
		Agrarian Policies and Commercialization of
		agriculture, rural indebtedness, Growth of
		modern industry, theory of economics change.
		CO6: state the Socio-Religious Reform Movements i.e.
		Brahmo Samaj, Aligarh Movement, Arya Samaj,
		Ramakrishna Mission.
		CO8: explain about the Growth of Political
		Consciousness, Foundation and Growth of
		the Indian National Congress from 1885-7905,
		Growth of Nationalism 1905-1919.
		CO9: describe about the Indian National Movement,
		non-cooperation Movement 1920-1922, The
		Civil Disobedience Movement.
		CO10: explain about Rise of Communal Politics,
		Separate electoral, Muslim League and Pakistan
		Resolution.
		CO11: explain about Partition and Independence, Quit
		India Movement, British Proposals for
		independence, Indian Independence Act of
		1947.
		CO12: explain about significant Developments after
		independence 1947-1964, Making of the
		Constitution, integration of princely states, the
		Re-organisation of States.
	Mathematics	
MAT-0241	(Advanced Calculus-I)	After completing the course, students will be able
	,	to:

		CO1: solve problems of Limit and Continuity of
		functions of Two or More Variables.
		CO2: describe the concept of Partial differentiation,
		derivability of real valued functions of two or
		three variables.
		CO3: differentiate Schwarz and Young's theorem and
		their applicability, statements of Inverse and
		Implicit function theorems and applications.
		CO4: practice the concept of differentiation, gradient,
		curl, divergence and its applications.
		CO5: apply Euler theorem, Taylor theorem, Jacobians,
		Envelopes and Evolutes.
		CO6: solve problems of Maximum, Minimum and
		saddle point of functions of two and three
		variables and Lagrange's method to solve
		questions related to this topic
MAT-0242	(Differential Equations	After completing the course, Student will be able to:
	I)	CO1: differentiate and find solutions of first and
		higher order differential equations.
		CO2: examine the techniques for obtaining solutions to
		ordinary differential equations.
		CO3: investigate the qualitative and quantitative
		behavior of solutions of system of differential
		equations.
		CO4: analyze the concept of simultaneous differential
		equations and orthogonality.
		CO5: calculate by using methods of solving differential
		equations using variation of parameters,
		reduction of order.
		CO6: apply the concept of solving and number of
		problems related to natural phenomenon,
		engineering and many other situations.
		CO7: describe the concept of Charpit general method
	(94-4:)	of solutions.
MAT-0243	(Statics)	After completing the course, students will be able
		to:
		47

		CO1: describe and apply the concept of composition and resolution of Concurrent Forces, Parallelogram and Triangle law of forces, Lami's theorem, Components of Forces and its applications in daily life. CO2: analyze the concepts of equilibrium conditions for coplanar concurrent forces, smooth inclined planes. CO3: explain the concept of Parallel forces and its types (parallel like and unlike forces) and resultant of these forces. CO4: solve problems related to Moment, Couple of forces, reduction of coplanar forces to Single force and Couple.
		CO5: describe Friction, Laws of Friction, problems
		related to Ladders, Rods, Spheres and Circle.
	Agriculture	
0216	(Agricultural Diversification and	After the completion of the course, the students will be able to:
	Machinery)	CO1: aid on works such as dairy, poultry, fishery,
		mushroom cultivation, animal husbandry, bee
		keeping.
		CO2: maintain grassy lawns and flower beds.
		CO3: raise winter and summer ornamental flowers
		(rose, gladioli, dahlias, dianthus, and foliage plants).
		CO4: get skills of landscape of an educational
		institute, factory, panchayat lands and office
		buildings.
		CO5: describe about medicinal, aromatic and spice
		plants.
		CO6: grow non-conventional plants.
		CO7: explain about Gentically Modified crops.
		CO8: describe the fundamentals of land measurements
		and land revenue.
		CO9: describe about the important parts of the tractor, 48

		combine, thresher and their maintenance.
		CO10: explain about various agricultural tools and
		implements.
0295	Retail Marketing	The students who successfully complete this course will be able to:
		CO1: use the retail strategies, building up a sustainable
		competitive advantage and core competence.
		CO2: elucidate the main strategies adopted by retailers,
		internationalization as a strategy.
		CO3: outline the process of choosing a store location
		and to discuss the various criteria for evaluating
		general retail locations and the specific sites
		within them.
		CO4: discuss the functions and process of Human
		resource management.
		CO5: analyze the structure of the Retail Organization
		across different retail formats.
		CO6: state the role of Merchandise Management in
		retail business.
		CO7: improve their practical skills in the retail sector.
	Computer Science	
CS05	(Computer Organisation)	The students after completing this course, will be able
		to:
		CO1: explain the structure, function and characteristics
		of computer systems.
		CO2: identify, understand and apply different number systems and codes.
		CO3: describe the basic building block concepts in
		combinatorial logic design, sequential building
		block, Microinstructions.
		CO4: state the concept of Microinstructions,
		Microprocessor and assembly language in detail.
CS06	(Object Oriented	The students after completing this course, will be able
	Programming Using C++)	to:
	C++)	CO1: differentiate between object oriented
L	1	

		programming and procedural oriented language
		and data types in C++.
		CO2: C++ features such as composition of objects,
		constructor, destructor, Operator overloading,
		inheritance, Polymorphism etc.
		CO3: Students will understand the concept of Virtual
	(Practical Based on	and pure virtual functions.
PCS03	Paper CS06)	The students after completing this course, will be able
1 C303		to:
		CO1: make programs on the concept of Classes and
		objects, access specifiers.
		CO2: do programming on declaring member function inside and outside class, static and friend
		functions.
		CO3: design programs on Constructor and destructor,
		Inheritance with its types, Private, public
		protected, Concept of polymorphism, operator
		overloading, method overloading etc.
		overloading, method overloading etc.
0238	Physical Education	After the completion of the course, the students will be able to:
		CO1: describe about First Aid management.
		CO2: follow the techniques and benefits of Gymnastics
		and Yoga.
		CO3: explain about Psychology and Sociological
		aspects.
		CO4: explain the various techniques to make a good
		Athlete, the process, principles, importance of
		Sports Training.
		CO5: improve their personality, motivation and be
		stress free.
		CO6: give suggestions for the improvement of sports
		performance.
	Fashion Designing	
0274	(T) 11:1 1 T) 11 C	
02/4	(Traditional Textiles of	After the course the students can:
0274	(Traditional Textiles of India)	CO1: explain about different types of Traditional

		Indian textiles
		CO2: explain the importance and relevance of Indian
		costumes
		CO3: design creations.
	Economics	
0218	(Public Finance And	After completing this course students will be able to:
	International Trade)	CO1: explain the concepts and functions of money,
		supply of money.
		CO2: describe the value of money and theory of money.
		CO3: analyze the concept of public finance, Govt.
		income in the form of taxes, Govt. expenditure
		and public debt.
		CO4: review International trade and theories of
		international trade.
		CO5: restate the working of international organization
		such as WTO, IMF, IBRD etc.
		CO6: describe deficit financing, its need and
		drawbacks.
		CO7: explain determination of terms of trade, factor
		affecting terms of trade and its impact on
		international trade.
		CO8: explain and prepare the balance of payment.
		CO9: describe the foreign exchange rate determination.
MUV0231	Music (Vocal)	On Completion of this course students would be able to:
		CO1: grasp the various theoretical aspects of prescribes
		Ragas, like how it originater, what are the general
		grammatical rules that govern the Ragas in this
		course etc.
		CO2: describe the concept of Taal and the use of
		various Taals in Hindustani music.
		CO3: describe the basic terminologies of Indian music
		as a whole.
		CO4: identify Gram, Upaj, Mukhda, Bol-baant,
		Khatka, Murki, Kan.

period. CO6: describe the life stories of the legacine of the	-
	-
Musicians and will get inspiration	on from their
lives.	
CO7: get greater command over voice	culture through
Vocal patterns.	
CO8: describe about genres like Sarga	mgeet in the
prescribed ragas.	
Political Science	
0234 (Indian Government and After the course, the students can:	
Politics) CO1: explain the philosophy of Indian	constitutions.
CO2: identify the causes, impact of Br	ritish colonial
rule.	
CO3: appreciate the various phases of	Indian national
movement.	
CO4: create value in young youth rega	arding the
patriotism.	
CO5: explain about the various Gover	nment of Indian
acts their provision and reforms	
CO6: describe the salient features in m	naking of Indian
Constitution.	
CO7: appreciate the socioeconomic po	olitical factors
which lead to the freedom strug	gle.
CO8: appreciate the fundamental right	s and duties and
the directive principle of state pe	olicy
CO9: evaluate the evolution, functioni	ng and
consequences of political parties	s in India.
CO10: identify how electoral rules and	d procedure in
India affect election	
CO11: explain the working of the Uni-	on Legislature-
Parliament-Composition and F	functions and the
Composition and functioning of	of the State
Legislature-Vidhan Sabha; Par	nchayati Raj
Institutions	

	S	SEMESTER-IV
	COMP	PULSORY SUBJECTS
0301	English	After completion of this course, student will be able to: CO1: critically analyse the poems. CO2: explain the current topics and come out with his/her own perception and thought. CO3: improve his/her writing skills through the practice of Report Writing. CO4: build vocabulary to use in their daily life. CO5: use the Idioms and phrases in his/her sentences. CO6: familiarise with the grammatical structure of the language to use in their daily life.
0303/0304	Punjabi/History and Culture of Punjab	After Punjabi course, the students can: CO1: 'ਛੇ ਛੱਲਾਂ' (ਇਕਾਂਗੀ ਸੰਗ੍ਰਹਿ) ਅਤੇ 'ਕੱਲਰ' (ਨਾਟਕ) ਪਾਠ-ਪੁਸਤਕ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਨਾਟਕ, ਇਕਾਂਗੀ ਅਤੇ ਰੰਗਮੰਚ ਦੇ ਆਪਸੀ ਸੰਬੰਧਾਂ ਅਤੇ ਸਿਧਾਂਤਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ । ਨਾਟਕ ਅਤੇ ਇਕਾਂਗੀ ਵਿਚਲੇ ਅੰਤਰ ਨੂੰ ਸਮਝਦੇ ਹਨ । ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸਮੂਹਿਕ ਰੂਪ ਵਿਚ ਕੰਮ ਕਰਨ ਦੀ ਭਾਵਨਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ । ਉਨ੍ਹਾਂ ਅੰਦਰਲੇ ਰਚਨਾਤਮਕ ਅਤੇ ਕਲਾਤਮਕ ਹੁਨਰ ਨੂੰ ਹੁੰਗਾਰਾ ਮਿਲਦਾ ਹੈ । ਵਿਦਿਆਰਥੀ ਆਪਣੇ ਵਿਚਾਰ ਸੁਤੰਤਰ ਰੂਪ ਵਿਚ ਪ੍ਰਗਟ ਕਰਨ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ । ਵਿਦਿਆਰਥੀ ਨਿੱਜੀ, ਸਮਾਜਿਕ, ਆਰਥਿਕ, ਰਾਜਨੀਤਿਕ, ਸਭਿਆਚਾਰਕ ਅਤੇ ਇਤਿਹਾਸਿਕ ਮਸਲਿਆਂ ਬਾਰੇ ਜਾਨਣ ਅਤੇ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ । ਵਿਦਿਆਰਥੀ ਮੰਚ (ਸਟੇਜ) ਉੱਪਰ ਪੇਸ਼ਕਾਰੀ ਲਈ ਉਤਸ਼ਾਹਿਤ ਹੁੰਦੇ ਹਨ । CO2: ਅੰਗਰੇਜੀ ਤੋਂ ਪੰਜਾਬੀ ਅਨੁਵਾਦ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਦੋ ਭਾਸ਼ਾਵਾਂ ਦਾ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ । ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਇਕ ਤੋਂ ਵੱਧ ਭਾਸ਼ਾਵਾਂ ਸਿਖਣ ਦੀ ਰੂਚੀ ਪੈਦਾ ਹੁੰਦੀ ਹੈ । ਇਕ ਭਾਸ਼ਾ ਤੋਂ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ ਅਨੁਵਾਦ ਜਿਥੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਦੋ ਭਾਸ਼ਾਵਾਂ ਦੇ ਆਪਸੀ ਸੰਬੰਧਾਂ ਦਾ ਗਿਆਨ ਪ੍ਰਦਾਨ ਕਰਦਾ ਹੈ, ਉੱਥੇ ਵਿਦਿਆਰਥੀ ਅੰਦਰ ਅਨੁਵਾਦਕ ਬਣਨ ਦੀ ਰੂਚੀ ਪੈਦਾ ਕਰਕੇ ਰੋਜ਼ਗਾਰ ਦੇ ਮੌਕੇ ਪ੍ਰਦਾਨ ਕਰਨ ਵਿਚ ਮੱਦਦ ਕਰਦਾ ਹੈ । CO3: ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨਾਲ ਸੰਬੰਧਿਤ ਭਾਗ ਦਾ ਅਧਿਐਨ ਕਰਦੇ ਸਮੇਂ ਮਾਤ-ਭਾਸ਼ਾ ਪੰਜਾਬੀ ਦੇ ਨਿਕਾਸ, ਵਿਕਾਸ ਅਤੇ ਅਜੋਕੀ ਸਥਿਤੀ ਨੂੰ ਮਸਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ । ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਨਾਲ ਸੰਬੰਧ ਅਤੇ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਪੰਜਾਬੀ ਦੀ ਅਹਿਮੀਅਤ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ । ਇਸ ਤਰ੍ਹਾਂ ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਪੰਜਾਬੀ ਦੀ ਅਜੋਕੀ ਸਥਿਤੀ ਬਾਰੇ ਜਾਣਕਾਰੀ ਰਖਦੇ ਹੋਏ ਇਸ ਦੀ ਹੋਂਦ ਨੂੰ ਬਚਾਈ ਰੱਖਣ ਲਈ ਯਤਨਸ਼ੀਲ ਰਹਿੰਦੇ ਹਨ ।

CO4: ਵਿਆਕਰਣ ਦੀ ਸਿੱਖਿਆ ਪ੍ਰਾਪਤ ਕਰਨ/ਪੜ੍ਹਨ ਸਮੇਂ ਵਿਦਿਆਰਥੀ ਜਿਥੇ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਬਾਰੇ ਡੂੰਘਾਈ ਵਿਚ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ ਉੱਥੇ ਪੰਜਾਬੀ ਦੇ ਇਕ-ਇਕ ਸ਼ਬਦ ਦੇ ਪਿੱਛੇ ਅੰਦਰੂਨੀ ਨਿਯਮਾਂ ਦੇ ਕਾਰਜਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I ਭਾਸ਼ਾ ਦਾ ਇਕ-ਇਕ ਸ਼ਬਦ ਕਿਵੇਂ ਹੋਂਦ ਵਿਚ ਆਉਦਾ ਹੈ I ਫਿਰ ਸ਼ਬਦਾਂ ਤੋਂ ਵਾਕ, ਉਪਵਾਕ, ਪੈਰ੍ਹੇ ਅਤੇ ਫਿਰ ਸਮੁੱਚੀ ਰਚਨਾ ਕਿਵੇਂ ਤਿਆਰ ਹੁੰਦੀ ਹੈ I ਕਿਸੇ ਵੀ ਭਾਸ਼ਾ ਨੂੰ ਸਿੱਖਣ ਲਈ ਵਿਆਕਰਣ ਦੀ ਪੜ੍ਹਾਈ ਅਤੇ ਜ਼ਰੂਰੀ ਹੈ I

Punjabi course outcomes translated into English

CO1: Through the study of Chhe Chhallan (Solitary Collection) and Kallar (Drama) textbooks,
Students gain knowledge about the
interrelationships and principles of drama and
theatre. Understand the difference between
drama and solitude. The feeling of working as a
group is created in the students. The creative and
artistic skills within them get a response.
Students become capable of expressing their
thoughts freely. Students become capable of
knowing and understandingpersonal, social,
economic, political, cultural, and historical
issues. Students are encouraged to perform on
stage.

CO2: Students gain knowledge of two languages through English to Punjabi translation. Students develop an interest in learning more than one language. While translation from one language to another language provides students with the knowledge of the interrelationship between two languages, it helps in providing employment opportunities by creating interest in the student to become a translator.

CO3: Students can understand the origin, development, and present status of their mother tongue Punjabi while studying the section related to the Punjabi language. They can understand the relationship of the Punjabi language with other languages

and the importance of their mother tongue Punjabi. In this way, the students keep trying to preserve the existence of their mother tongue Punjabi while keeping information about the current situation.

CO4: While learning/reading grammar, students gain in-depth knowledge about their mother tongue, and they also gain information about the functions of internal rules behind each word of Punjabi. How each word of the language comes into being. Then how are sentences, subsentences, paragraphs, and then the whole composition prepared from the words? Studying grammar is essential for learning any language.

History and Culture of Punjab

After competition of this course, the students will be able to:

CO1: explain about colonial rule in Punjab i.e.

Annexation of Punjab Board of Administration.

CO2: explain about Western Education introduced by Britishers.

CO3: explain about Agriculture Development.

CO4: explain about early socio-religious reform in all religions.

CO5: explain about Socio-Religious Reform Movement i.e. Arya Samaj Singh Sabha, Ahmadiyas, Ad Dharm Movement.

CO6: explain about Development of press & Literature.

CO7: explain about the emergence of political

Consciousness i.e. Hadar movement, Jallianwala

Bagh Massacre.

CO8: describe about the Gurdwara Reform movement i.e major marchas, Activities of Babbar Akalis.

CO9: describe about the freedom struggle i.e. all Monuments.

	ELE	CO10: explain about the Partition of Punjab and its Aftermath. CO11: explain about Post-Independence Punjab and it gives knowledge about physical, geographical maps.
0309/0308/ 0305	Punjabi/Hindi/English	CO1: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ ਚੰਗ' ਪੁਸਤਕ ਦੇ ਅਧਿਐਨ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆ ਨੂੰ ਸੂਫ਼ੀ ਕਾਵਿ-ਧਾਰਾ ਅਤੇ ਕਿੱਸਾ ਕਾਵਿ-ਧਾਰਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੁੰਦੀ ਹੈ। ਮੱਧਕਾਲੀ ਸਾਹਿਤ ਦਿੱਚ ਗੁਰਮਤਿ ਕਾਵਿ-ਧਾਰਾ ਦੇ ਨਾਲ-ਨਾਲ ਸੂਫ਼ੀ ਸਾਹਿਤ ਦੀ ਵੀ ਮਹਾਨ ਪ੍ਰੰਪਰਾ ਰਹੀ ਹੈ। ਬਾਬਾ ਫਰੀਦ ਤੋਂ ਲੈ ਕੇ ਬੁੱਲ੍ਹੇ ਸ਼ਾਹ ਤੱਕ ਦੇ ਸੂਫ਼ੀ ਸਾਹਿਤ ਨੂੰ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਵਿੱਚਵਾਤਾਵਰਣ ਮਿਲਿਆ ਹੈ। ਇਸਦਾ ਕਾਰਨ ਇਸ ਧਾਰਾ ਦੇ ਸਾਹਿਤ ਦੀ ਲੋਕ-ਪੱਖੀ ਸੂਝ ਅਤੇ ਮਹਾਨ ਸਾਹਿਤ ਵਾਲੇ ਗੁਯਾਂ ਦਾ ਧਾਰਨੀ ਹੋਣਾ ਹੈ। ਇਸੇ ਤਰ੍ਹਾਂ ਕਿੱਸਾ ਕਾਵਿ-ਧਾਰਾ ਦੇ ਅਧਾਰ ਵੀ ਲੋਕ ਚੇਤਨਾ ਵਿੱਚ ਹਨ। ਪ੍ਰੇਮ ਕਿੱਸਿਆ ਦੀ ਪ੍ਰੰਪਰਾ ਦੇ ਨਾਲ-ਨਾਲ ਨੈਤਿਕ ਅਤੇ ਵੀਰ ਗਾਥਵਾਂ ਦੇ ਕਿੱਸੇ ਵੀ ਪੰਜਾਬੀ ਦੇ ਇਸ ਅਮੀਰ ਪ੍ਰੰਪਰਾ ਦਾ ਮਹੱਤਵਪੂਰਨ ਹਿੱਸਾ ਹਨ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਇਸ ਤਰ੍ਹਾਂ ਦੇ ਅਧਿਐਨ ਰਾਹੀਂ ਨੈਤਿਕ ਜੀਵਨ ਦੀ ਸੋਲੀ ਹੈ।। CO2: ਸੁਰਿੰਦਰ ਕੁਮਾਰ ਦਵੇਸ਼ਵਰ ਦੁਆਰਾ ਸੰਪਾਦਕ ਕੀਤੀ 'ਕਥਾ ਪੁਵਾਰ' ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਜੀਵਨ ਦੀ ਮਾਰਗਦਰਸ਼ਕ ਬਣਦੀ ਹੈ। ਵੱਖ-ਵੱਖ ਕਹਾਣੀਆਂ ਰਾਹੀਂ ਜੀਵਨ ਦੀ ਸੋਲੀ ਦਿੱਤੀ ਗਈ ਹੈ। 'ਆਲ੍ਹਣੇ ਦੇ ਬੋਟ' ਕਹਾਣੀ ਰਾਹੀਂ ਦੇਸ਼-ਭਗਤੀ ਦੀ ਕੁਰਬਾਨੀ ਦੇ ਜ਼ਜ਼ਬੇ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ। 'ਭੱਤਾ'ਕਹਾਣੀ ਰਾਹੀਂ ਨਿਮਨ ਕਿਸਾਨੀ ਦੇ ਜੀਵਨ ਅਤੇ ਮਨੁੱਖੀ ਭਾਵਨਾਵਾਂ ਦੀ ਪੇਸ਼ਕਾਰੀ ਬੜੇ ਹੀ ਮਨੋਵਿਗਿਆਨਕ ਫੇਰੀ ਰਾਹੀਂ ਪੇਸ਼ ਕੀਤੀ ਗਈ ਹੈ। 'ਜੀਨਤ ਆਪਾ' ਕਹਾਣੀ ਰਾਹੀਂ ਸਮਾਜਿਕ ਮਰਯਾਦਾ ਵਿੱਚ ਜਕੜੀ ਇਸਤਰੀ ਦੀ ਜੀਣ-ਥੀਣ ਦੀ ਪ੍ਰਬਲ ਇੱਛਾ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ। 'ਸਵੇਰ ਹੋਣ ਤੱਕ' ਕਹਾਣੀ ਰਾਹੀਂ ਪੇਡੂ ਕਿਸਾਨ ਦੇ ਥਕੇਵੇਂ 'ਦੁੱਖਾਂ ਬੇਅਰਾਮੀ ਭਰਪੂਰ ਜੀਵਨ ਦੀ ਪੇਸ਼ਕਾਰੀ ਕੀਤੀ ਗਈ ਹੈ। 'ਸ਼ੇਰਨੀਆਂ' ਕਹਾਣੀ ਰਾਹੀਂ ਬਦਲ ਰਹੇ ਸਮਾਜ ਦੀ ਝਾਕੀ ਪੇਸ਼ ਕੀਤੀ ਗਈ ਹੈ। ਬਦਲ ਰਹੇ ਸਮਾਜ ਦੀ ਝਾਕੀ ਪੇਸ਼ ਕੀਤੀ ਗਈ ਹੈ। ਬਦਲ ਰਹੇ ਸਮਾਜ ਵਿਚ ਕੁੜੀਆਂ ਵੀ ਮਰਦਾਂ ਵਾਂਗ ਹਰ ਤਰ੍ਹਾਂ ਦੇ ਕੰਮ ਵਿੱਚ ਆਪਣਾ ਉਸਾਰੂ ਰੋਲ ਅਦਾ ਕਰ ਰਹੀਆਂ ਹਨ

ਕਾਰਨ ਘਰ ਵਿੱਚ ਪੈਦਾ ਹੋਣ ਵਾਲਾ ਤਣਾਉ ਹੈ। ਇਸ ਦਾ ਵਿਸ਼ਾ ਨਵੀਨ ਅਤੇ ਮਨੋਵਿਗਿਆਨਿਕ ਹੈ।

'ਸੱਗੀ ਫੁੱਲਾਂ' ਕਹਾਣੀ ਦਾ ਵਿਸ਼ਾ ਵੀ ਪੰਜਾਬ ਦੀ ਨਿਮਨ ਕਿਸਾਨੀ ਦੇ ਜੀਵਨ ਦੇ ਵੱਖ-ਵੱਖ ਪਹਿਲੂਆਂ ਨੂੰ ਦਰਸਾਉਂਦਾ ਹੈ। ਕਿਸਾਨੀ ਦੀਆਂ ਤੰਗੀਆਂ ਅਤੇ ਸਰੀਕੇ ਬਾਜੀ ਨੂੰ ਬਾਖੁਬੀ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ।

'ਕਬਰਾਂ ਤੋਂ ਸਿਵਿਆਂ' ਨੂੰ ਕਹਾਣੀ ਰਾਹੀਂ ਕੱਟੜਧਰਮੀ ਵਿਚਾਰ ਧਾਰਾ ਅਤੇ ਫਿਰਕੂ ਪਾਗਲਪਨ ਵਿਰੁੱਧ ਨਫ਼ਤਰ ਦੇ ਭਾਵ ਉਤਪੰਨ ਹੁੰਦੇ ਹਨ। 'ਮੋਹਮਿੱਟੀ' ਕਹਾਣੀ ਰਾਹੀਂ ਪੰਜਾਬ ਦੀ ਮੱਧ ਵਰਗੀ ਕਿਸਾਨ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ। ਜਿਸ ਵਿੱਚ ਇੱਕ ਕਿਸਾਨ ਸਖ਼ਤ ਮਿਹਨਤ ਕਰਦਾ ਹੈ, ਪਰ ਇਸ ਦੇ ਬਾਵਜੂਦ ਉਹ ਆਰਥਿਕ ਤੰਗੀਆਂ ਤੇ ਪਰੇਸ਼ਾਨੀਆਂ ਦਾ ਸਾਹਮਣਾ ਕਰਦਾ ਹੋਇਆ ਘਰੇਲੂ ਰਿਸ਼ਤਿਆਂ ਦੇ ਤਣਨੀਤ ਵਿਚੋਂ ਗੁਜ਼ਰਦਾ ਹੈ।

'ਇੱਕਵੀਂ ਸਦੀ' ਕਹਾਣੀ ਰਾਹੀਂ ਅਜੋਕੇ ਮਨੁੱਖ ਨੂੰ ਆਪਣੇ ਆਂਢ-ਗੁਆਢ ਤੇ ਰਿਸ਼ਤੇਦਾਰਾਂ ਨਾਲ ਮਿਲ-ਗਿਲ, ਅਪਣੱਤ ਤੇ ਸਾਂਝ ਨਾਲ ਰਹਿਣ ਦੀ ਪ੍ਰੇਰਨਾ ਦੇਣਾ ਹੈ। 'ਬਰਫ ਦਾ ਟਾਨਵ' ਕਹਾਣੀ ਰਾਹੀਂ ਗਣੇਸ਼ੀਅਰ ਦੀ ਰਾਖੀ ਕਰ ਰਹੇ ਸੈਟਿਕਸ ਦੀਆਂ ਦੁਸ਼ਵਰਗੀਆਂ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ। ਸੈਨਿਕ ਨਵੇਂ ਗਣੇਸ਼ੀਅਰ ਦੇ ਭਿਆਨਕ ਰੂਪ ਦਾ ਸਾਹਮਣਾ ਕਰਦੇ ਹੋਏ ਦੇਸ਼ ਦੀ ਰਾਖੀ ਕਰਦੇ ਹਨ। 'ਦਰਦ ਵਿਛੋੜੇ ਦਾ ਹਾਣੀ' ਕਹਾਣੀ ਰਾਹੀਂ ਦੇਸ਼ ਦੀ ਵੰਡ ਦੇ ਦੁਖਾਂਤ ਨੂੰ ਪੇਸ਼ ਕਰਦੇ ਹੋਏ ਆਪਣਿਆਂ ਤੋਂ ਵਿਛੜਨ ਦੇ ਦਰਦ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ।

CO3: ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਰਾਹੀਂ ਵਿਦਿਆਂਰਥੀਆਂ ਨੂੰ ਸ਼ੂਫੀ ਕਾਵਿ ਅਤੇ ਕਿੱਸਾ ਕਾਵਿ ਦੀ ਅਮੀਰ ਪ੍ਰੰਪਰਾ ਨਾਲ ਜਾਣ-ਪਛਾਣ ਕਰਵਾਈ ਗਈ ਹੈ।

CO4: ਸਾਹਿਤ ਅਲੋਚਨਾ, ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਤੇ ਸਮਾਜ, ਸਾਹਿਤ ਤੇ ਸ਼ਖਸ਼ੀਅਤ , ਸਾਹਿਤ ਤੇ ਸ਼ੈਲੀ, ਸਾਹਿਤ ਤੇ ਮਨੋਵਿਗਿਆਨ, ਸਾਹਤ ਤੇ ਵਿਗਿਆਨ ਦੇ ਵਿਸ਼ਿਆਂ ਰਾਹੀਂ , ਸਾਹਿਤ ਦੀ ਸੈਲੀ ਕਰਵਾਈ ਗਈ ਹੈ। ਸਾਹਿਤ ਸਮਾਜ ਦੇ ਸੰਬੰਧਾਂ ਨੂੰ ਦਰਸਾਉਂਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਪ੍ਰਤੀ ਦਿਲਚਸਪ ਬਣਾਉਣ ਲਈ ਪ੍ਰੇਰਿਆ ਗਿਆ ਹੈ।

CO5: ਉਪਭਾਸ਼ਾ ਵਿਗਿਆਨ ਰਾਹੀਂ ਭਾਸ਼ਾ ਦੀ ਜਾਣਕਾਰੀ ਅਤੇ ਉਪਭਾਸ਼ਾ ਦੀ ਪਛਾਣ ਵਿਧੀ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਹੈ। ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ ਦੀ ਸਮਝ ਹੋਣੀ ਵਿਦਿਆਰਥੀਆਂ ਲਈ ਜ਼ਰੂਰੀ ਹੈ।

Punjabi course outcome translated into English:

CO1: Through the study of medieval Punjabi poetry book

the students get knowledge about Sufi poetry and Qisa

poetry. In medieval literature, Gurmat poetry has been a great tradition as well as Sufi literature. Sufi literature from Baba Farid to Bulleh Shah has found a context in the history of Punjabi literature. The reason for this is the people-oriented understanding of this stream of literature and the adoption of great literary figures. Similarly, the basis of Kisa Kavi-Dhara is also in people's consciousness. Along with the tradition of love stories, moral and heroic tales are also an important part of this rich tradition of Punjabi. Through the study of these poems, the students get knowledge about morality.

CO 2: 'Katha Puwar' edited by Surinder Kumar Daveshwar becomes a guide to the life of the students. Life has been told through different stories.

> The spirit of patriotic sacrifice has been presented through the story of 'Alahne De Bot'.

Through the story 'Bhatta', the life of the lowly peasants and the presentation of human emotions have been presented through a very psychological visit. Through the story of 'Jeenat Apa', the strong desire of a poor woman to live and eat has been presented in social norms. Through the story of 'till dawn, the fatigue, suffering, and discomfort of the peasant farmer's life has been presented.

A tableau of the changing society has been presented through the story of 'Sherniyan'. In the changing society, girls are also playing a constructive role in all kinds of work like men

Through the story of 'Goi', there is tension in the home due to cultural values. Its subject matter is innovative and psychological.

The theme of the story 'Sagi Phulan' also shows various aspects of the life of the lowly peasants of Punjab. The hardships of the peasantry and Sarike Baji have been well presented.

Through the story of 'Kabaran Te Siwaan', sentiments of hatred against the sectarian ideology and communal madness are generated. The middle-class farmer of Punjab has been introduced through the story of 'Mohmitty'. Which a farmer works hard, but despite this, he goes through the strain of domestic relations while facing economic hardships and troubles.

Through the story of 'First Century', the modern man is to be inspired to live in harmony with his neighborhood and relatives. Through the story 'Barf da Tanav', the misdeeds of Satiks guarding Ganesha have been presented. Soldiers protect the country while facing the terrifying form of the new Ganesha. Through the story 'Dard Vikhode Da Haani', presenting the tragedy of the partition of the country, the pain of separation from oneself has been presented.

- CO3: Students are introduced to the rich tradition of Sufi poetry and Qisa poetry through the history of Punjabi literature.
- CO4: Literary Criticism, through the subjects of literature and society, literature and personality, literature and style, literature and psychology, and literature and science, a review of literature has been conducted.

 Literature is encouraged to make students interested in literature by showing the relationship between

	society.
	CO5: Language information and dialect identification
	methods are presented through dialect studies.
	Students get an understanding of the dialects of the
	Punjabi language.
	Hindi
	r विद्यार्थी धर्मवीर भारती के जीवन, रचनाओं, काव्यगत विशेषताओं
तरंगिणी	और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
(काव्य-पुस्तक)	
3	r विद्यार्थी धर्मवीर भारती की टूटा पहिया, अवशिष्ट, फूल,
r महादेवी वर्मा	मोमबतियां, सपने और कनुप्रिया कविताओं के माध्यम से उनकी
r अज्ञेय	वैविद्यमुखी काव्य-प्रतिभा से परिचय प्राप्त कर सकेंगे।
r धर्मवीर भारती	r विद्यार्थी महादेवी वर्मा के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
	r विद्यार्थी महादेवी वर्मा की ऐसा तेरा लोक, फिर विकल हैं प्राण मेरे, यह मंदिर का दीप, निभृत मिलन और क्या पूजन क्या अर्चन रे किवताओं का सार, व्याख्या और मूल-संवेदना को पढ़/समझ कर महादेवी जी के काव्य में प्रतिपादित विभिन्न आदशों/मूल्यों को रेखांकित कर पाएंगे। आधुनिक मीरा महादेवी वर्मा की आध्यात्मिक प्रेम-भावना और इष्ट के प्रति तड़प से ओत-प्रोत किवताओं में प्रेमा भिक्त की पराकाष्ठा दिखाई देती है।
	r विद्यार्थी अज्ञेय जी के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
	r विद्यार्थी अज्ञेय की रचनाओं जो कहा नहीं गया, सो रहा है झोंप, मुक्त है आकाश और यह महाशून्य का शिविर कविताओं का सार, व्याख्या और मूल-संवेदना को पढ़/समझ कर अज्ञेय जी के काव्य में प्रतिपादित विभिन्न आदशों/मूल्यों और प्रयोगवादी काव्य-आदशों से परिचय प्राप्त कर पाएंगे।

r विद्यार्थी धर्मवीर भारती के जीवन, रचनाओं, काव्यगत विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।

r विद्यार्थी धर्मवीर भारती की टूटा पहिया, अवशिष्ट, फूल, मोमबितयां, सपने और कनुप्रिया कविताओं के माध्यम से उनकी वैविद्यमुखी काव्य-प्रतिभा से परचिय प्राप्त कर सकेंगे।

r विद्यार्थी एकांकी के माध्यम से समाज और जीवन की विविध समस्याओं से अवगत होंगे और उन समस्याओं के समाधान के लिए प्रेरित होंगे। उनमें समस्या-समाधान की क्षमता विकसित होगी।

आदर्श एकांकी संग्रह

r समुद्रगुप्त पराक्रमांक

r मैत्री

r नये मेहमान

r मेंड़ तोड़ दी

r दूर और पास

r समुद्रगुप्त पराक्रमांक एकांकी के माध्यम से विद्यार्थी सम्राट समुद्रगुप्त के कुशल प्रशासन, बुद्धि कौशल और राजनैतिक समझ का ज्ञान प्राप्त करेंगे और उसको अपने जीवन में उतार पाएंगे। विकट परिस्थितयों में कैसे सहज रह कर न्याय किया जाता है, इस एकांकी से भली-भांति पता चल जाता है।

r मैत्री एकांकी के माध्यम से विद्यार्थी स्वार्थप्रियता और लोलुपता से होने वाले दुष्परिणामों से परिचित होंगे। लालच और स्वार्थप्रियता कैसे दो अभिन्न मित्रों को दुश्मन बना सकती है, यह इस एकांकी में अत्यंत नाटकीय ढंग से प्रस्तुत किया गया है। विद्यार्थी यह सीख पाएंगे कि सफल मैत्री में लालच, स्वार्थप्रियता और अहंकार का कोई स्थान नहीं होना चाहिए।

r नये मेहमान एकांकी मध्यवर्गीय परिवारों की सामाजिक-आर्थिक समस्यायों पर प्रकाश डालती है। लेखक ने इसके माध्यम से प्रेम और कर्त्तव्य के संबंध पर प्रकाश डाला है। विद्यार्थी यह जान पाएंगे कि कैसे अनचाहे मेहमान जीवन में उथल-पुथल ला सकते हैं।

r मेंड़ तोड़ दी एकांकी के माध्यम से लेखक ने ग्रामीण किसानों के जीवन और उनकी समस्यायों को अंकित किया है। अकसर देखा गया है कि गाँवों में बलिष्ठ और दबंग किसान आपनी गुण्डागर्दी से सारे गाँव को आतंकित करते हैं। विद्यार्थी यह सीख पाएंगे कि दया, सिहष्णुता और एकता ऐसे मूल्य हैं जिन से किसी को भी सुधारा जा सकता है। दबंग से दबंग व्यक्ति भी एकता को हरा या

	दबा नहीं सकता।
	r दूर और पास में लेखक ने टूटते संयुक्त परिवारों की समस्या को उठाया है परन्तु साथ ही यह भी सिद्ध करने का प्रयास किया है कि नाखुनों से कभी माँस को अलग नहीं किया जा सकता। विद्यार्थी इस एकांकी से यह सीख लेंगे कि शारीरिक दूरी कभी दिलों को दूर नहीं कर सकती और नम से बंधे रिश्ते कभी नहीं टूटा करते।
	r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे। विद्यार्थी हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक प्रवृतियों को समझने में सक्षम होंगे। विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे।
हिन्दी साहित्य का इतिहास	r विद्यार्थी हिन्दी साहित्य के आधुनिक काल के भारतेन्दु युग और
r आधुनिक काल	द्विवेदी युग के अतिरिक्त छायावाद, प्रगतिवाद, प्रयोगवाद और नयी किवता जैसे वादों की पृष्ठभूमि, विशेषताएँ और काव्यादर्शों से पिरचित होंगे। वे यह जान पाएंगे कि कैसे यह काल विविध वादों और विचारों को आत्मसात करता चलता है।
	r हिन्दी एकांकी विधा की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया जाएगा।
समीक्षा सिद्धांत r हिन्दी एकांकी	r हिन्दी एकांकी की परिभाषा, उपन्यास के विविध तत्व और उपन्यास के बहु-आयामी वर्गीकरण से विद्यार्थियों को परिचित कराया जाएगा।
	r शुद्ध भाषा लिखना एक कला है। अतः यह आवश्यक है कि प्रत्येक वाक्य को शुद्ध रूप में पढ़ा/लिखा जाए। उसके लिए व्याकरण का ज्ञान और अत्त्यास परमावश्यक है।
व्यावहारिक व्याकरण एवं	r सार-लेखन, विस्तार-लेखन और कार्यालयीय पत्र-लेखन से विद्यार्थी अपने लेखन-कौशल को निखार सकेंगे और भविष्य में

r सार लेखन r टिप्पणी लेखन का ज्ञान प्राप्त	त कर विद्यार्थी यह जान पाएंगे कि
विविध कार्यालयों में हिन्दी की	नी टिप्पणियों का सटीक प्रयोग कैसे
r विस्तारण/विस्तार लेखन किया जाता है और इसकी आ	वश्यक्ता एवं उपयोगिता क्या है।
r कार्यालयीय पत्र-लेखन Eng	glish
	Semester student will be able
r टिप्पणी लेखन CO1: comprehend the rid	chness of literature and make
the critical analysis	s of poems.
CO2: relate various liter	cary aspects through the texts
which capacitate t	them to enrich their literary,
research and cultu	aral values and make them
aware of self and	d society.
CO3: describe the variou	us forms of figure of speech
and classify a deta	ailed study of literary devices.
CO4: compile and analy	ze the different ways in which
the grammar has b	been described like precis
writing and compr	rehension.
CO5: improve and devel	lop his/her reading and writing
skills through one	word substitution.
History	
0397 (History of India After completion of this	course, the students will be
1469-1849 A.D) able to:	
CO1: explain about the b	broad development in the
History of the Pun	njab from the mid15th to the
mid19th Century i	i.e. The medieval period.
CO2: explain about the l	life and teachings of Shri Guru
Nanak Dev ji.	
CO3: explain about Shri	i Guru Hargobind ji, new policy
And its identificat	tion, martyrdom of Shri Guru
Tegh Bahadur ji a	and its significance.
CO4: explain about circu	umstances leading to the
creation of Khalsa	a and its significance the new
injunctions and sy	mbols of the Khalsa.

rule under Banda Bahadur, Socio-economic transformation. CO6: explain about the rule of Rakhi, Gurmata and Dal Khalsa in 18th Century Policy, emergence of autonomous chiefs. CO7: explain about unification under Ranjit Singh, Expansion of the kingdom of Lahore, Civil and Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, Monotonic Sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform continuity of Functions of Single Variable.			CO5: describe about the establishment of independent
CO6: explain about the rule of Rakhi, Gurmata and Dal Khalsa in 18th Century Policy, emergence of autonomous chiefs. CO7: explain about unification under Ranjit Singh, Expansion of the kingdom of Lahore, Civil and Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab, CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. MAT-0341 Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			rule under Banda Bahadur, Socio-economic
Khalsa in 18th Century Policy, emergence of autonomous chiefs. CO7: explain about unification under Ranjit Singh, Expansion of the kingdom of Lahore, Civil and Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. MAT-0341 Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			transformation.
autonomous chiefs. CO7: explain about unification under Ranjit Singh, Expansion of the kingdom of Lahore, Civil and Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics MAT-0341 (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO6: explain about the rule of Rakhi, Gurmata and Dal
CO7: explain about unification under Ranjit Singh, Expansion of the kingdom of Lahore, Civil and Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Khalsa in 18th Century Policy, emergence of
Expansion of the kingdom of Lahore, Civil and Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. MAT-0341 (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			autonomous chiefs.
Provincial Administration, Land Reverse System Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. MAT-0341 (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO7: explain about unification under Ranjit Singh,
Under Maharaja Ranjit Singh. CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Expansion of the kingdom of Lahore, Civil and
CO8: describe about social structure in the early 19th century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Provincial Administration, Land Reverse System
century Punjab. CO9: It provides knowledge to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics MAT-0341 After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Under Maharaja Ranjit Singh.
to the students about Anglo-Sikh relations up to 1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO8: describe about social structure in the early 19th
1839, Political development 1839-1849. CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			century Punjab. CO9: It provides knowledge
CO10: explain about First and Second Anglo-Sikh Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			to the students about Anglo-Sikh relations up to
Wars and the annexation of the Punjab. CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			1839, Political development 1839-1849.
CO11: explain about important historical places of the Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. MAT-0341 Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO10: explain about First and Second Anglo-Sikh
Punjab in the outline map of Punjab, Battle of Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Wars and the annexation of the Punjab.
Banda Bahadur, Kingdom of Lahore. Mathematics (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO11: explain about important historical places of the
MAT-0341 (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Punjab in the outline map of Punjab, Battle of
MAT-0341 (Advanced Calculus-II) After completing the course, students will be able to: CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Banda Bahadur, Kingdom of Lahore.
CO1: explain the concept of Sequences, bounded sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform		Mathematics	
sequences, Convergence and Divergence and Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform	MAT-0341	(Advanced Calculus-II)	After completing the course, students will be able to:
Oscillation of sequences, CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO1: explain the concept of Sequences, bounded
CO2: analyse the theorems related to Sequences, Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			sequences, Convergence and Divergence and
Monotonic Sequences, and Cauchy's Convergence of sequences. CO3: explain the Sequential continuity and Uniform			Oscillation of sequences,
Convergence of sequences. CO3: explain the Sequential continuity and Uniform			CO2: analyse the theorems related to Sequences,
CO3: explain the Sequential continuity and Uniform			Monotonic Sequences, and Cauchy's
			Convergence of sequences.
continuity of Functions of Single Variable.			CO3: explain the Sequential continuity and Uniform
			continuity of Functions of Single Variable.
CO4: use Series and tests to check the convergence and			CO4: use Series and tests to check the convergence and
non-convergence of series like comparison test.			non-convergence of series like comparison test.
CO5: perform many tests like Cauchy's Integral test,			CO5: perform many tests like Cauchy's Integral test,
Cauchy's Root test, Ratio test, D'Alembert test			
etc. and their difference from one another to			Cauchy's Root test, Ratio test, D'Alembert test
solve various problems.			•

		CO6: rearrange absolute Convergent series and
		Riemann's Rearrangement Theorem.
MAT-0342	(Differntial Equations II)	After completing the course, students will be able to:
		CO1: solve questions of basic concepts of Power Series
		methods, Bessel and Legendre functions.
		CO2: describe about partial differential equations of
		first order, Integral Surfaces and Orthogonality
		of System of Surfaces.
		CO3: describe the concepts of Laplace transforms,
		Inverse Laplace transforms and its applications.
		CO4: verify the existence theorem for Laplace
		transformations and its applications.
MAT-0343	(Dynamics)	After completing the course, students will be able to:
		CO1: describe and analyze Motion of particle with
		constant acceleration, acceleration of Falling
		bodies and its practical applications.
		CO2: analyze Motion of two particles connected with a
		string, motion along smooth inclined plane,
		Constrained Motion along plane.
		CO3: verify motion under gravity and motion of any
		particle in vertically upward direction.
		CO4: describe the concept of Simple Harmonic Motion
		and Elastic String.
		CO5: apply Curvilinear motion of a particle and will
		able to solve day to day problems.
		CO6: apply the concepts of Work, Power, Potential
		Energy and the effect of gravitation on these
		Forces.
		CO7: describe and solve problems regarding The
		concept of Relative Motion and various topics
		related to this concept like velocity and
		acceleration.
		CO8: describe the various types of momentum like
		Angular and Impulsive.
	Agriculture	
	8220 0220020	After the completion of the course, the students will be
<u> </u>	<u> </u>	65

0316	(Cultivation Practices of	able to:
	Vegetables, Timber and	CO1: describe about the tillage, fundamentals and
	basic Statistical	principles of tillage, zero tillage, and tillage
	Methods)	implements.
		CO2: describe about the cultivation practices of potato,
		tomato, bhindi, cabbage, onion and asparagus.
		CO3: explain about timbers and lumbers.
		CO4: raise Dalbergia, Tectona, Poplar and
		Eucalyptus trees.
		CO5: apply statistical methods for agricultural work
		including mean, mode, median, chi-square,
		standard deviation.
0395	Retail Marketing	The students who successfully complete this course will be able to:
		CO1: state the impact of consumers, manufacturers,
		government, and competition in decision making
		during retail pricing.
		CO2: apply the retail pricing strategies and tools.
		CO3: use the various methods of advertising and sales
		promotion employed by the retailer.
		CO4: discuss the tools and techniques of personal
		selling.
		CO5: examine the role and impact of publicity for the
		retail organization.
		CO6: explain the concept and techniques of retail store
		management and Visual merchandising.
	Computer Science	
CS07	(Data Base Concepts)	The students after completing this course, will be able
		to:
		CO1: discuss Database management systems, databases
		and its applications.
		CO2: state about the good formal foundation on the
		relational model.
		CO3: explain about relational algebra and calculus.
		CO4: normalize the database & understand the internal

CS08 (Data Structures) Students after completing this course, will be able to: CO1: apply the basic concepts of data structures and algorithms. CO2: describe the concepts about searching and sorting techniques. CO3: apply the basic concepts about stacks, queues, lists, trees and graphs CO4: write the algorithms and follow step by step approach in solving problems with the help of fundamental data structures PCS04 (Practical Based Paper CS08) (Practical Based Paper CS08) The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system. CO5: state about function of composition of blood			data structure.
algorithms. CO2: describe the concepts about searching and sorting techniques. CO3: apply the basic concepts about stacks, queues, lists, trees and graphs CO4: write the algorithms and follow step by step approach in solving problems with the help of fundamental data structures The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.	CS08	(Data Structures)	Students after completing this course, will be able to:
CO2: describe the concepts about searching and sorting techniques. CO3: apply the basic concepts about stacks, queues, lists, trees and graphs CO4: write the algorithms and follow step by step approach in solving problems with the help of fundamental data structures The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO1: apply the basic concepts of data structures and
techniques. CO3: apply the basic concepts about stacks, queues, lists, trees and graphs CO4: write the algorithms and follow step by step approach in solving problems with the help of fundamental data structures The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			algorithms.
CO3: apply the basic concepts about stacks, queues, lists, trees and graphs CO4: write the algorithms and follow step by step approach in solving problems with the help of fundamental data structures The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO2: describe the concepts about searching and sorting
PCS04 (Practical Based Paper CS08) (Practical Based Paper CS08) (Practical Based Paper CS08) (Practical Based Paper CS08) The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			techniques.
PCS04 (Practical Based Paper CS08) (Practical Based Paper CS08) (Practical Based Paper CS08) The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO3: apply the basic concepts about stacks, queues,
PCS04 (Practical Based Paper CS08) (Practical Based Paper CS08) The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			lists, trees and graphs
PCS04 (Practical Based Paper CS08) fundamental data structures The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO4: write the algorithms and follow step by step
PCS04 (Practical Based Paper CS08) The students after completing this course, will be able to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			approach in solving problems with the help of
CS08) to: CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			fundamental data structures
CO1: state how data can be stored in memory. CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.	PCS04	_	The students after completing this course, will be able
CO2: implement Arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.		CS08)	to:
array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO1: state how data can be stored in memory.
CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO2: implement Arrays and various operations on
operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			array.
CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO3: implement Stacks and Queues and various
CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			operations on them.
CO6: implement various searching and sorting techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO4: implement the concept of Linked List.
techniques along with their Complexity. CO7: implement Graph and Graph traversal techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO5: implement the concept of various types of Trees.
CO7: implement Graph and Graph traversal techniques. Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO6: implement various searching and sorting
techniques. O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			techniques along with their Complexity.
O338 Physical Education After the course, the students will be able to: CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO7: implement Graph and Graph traversal
CO1: describe about the Preliminary idea and History of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			techniques.
of Physical Education. CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.	0338	Physical Education	After the course, the students will be able to:
CO2: describe about Biological and Sociological foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO1: describe about the Preliminary idea and History
foundation of Physical education. CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			of Physical Education.
CO3: state the meaning of respiration and the organs of respiratory system. CO4: develop exercise of human's Organic system.			CO2: describe about Biological and Sociological
respiratory system. CO4: develop exercise of human's Organic system.			foundation of Physical education.
CO4: develop exercise of human's Organic system.			CO3: state the meaning of respiration and the organs of
			respiratory system.
CO5: state about function of composition of blood			CO4: develop exercise of human's Organic system.
			CO5: state about function of composition of blood
system.			system.
CO6: state about control of heart rate, types of blood			CO6: state about control of heart rate, types of blood

		vessels and cardiac cycle.
	Fashion Designing	After the course, the students can:
0372	(History of Indian and	CO1: explain the history and revolution of World
	World Costume)	Costumes.
		CO2: explain the importance and relevance of Indian
		and World Costumes.
	(Garment Designing and	CO1: explain about Fashion illustration.
	Illustration-Practical)	CO2: draft basic blocks.
		CO3: create various structural of Drafting and
		adaptation of collars and sleeves.
		CO4: design garments.
	(Pattern Making and	
	Construction Techniques-Practical)	CO2: describe about different concets of Pottorn
	Toomsques Truewous)	CO2: describe about different aspects of Pattern Making.
		CO3: do Dart Manipulation.
		CO3. do Dart Manipulation.
0210	Economics	
0319	(Quantitative Methods)	After completing this course students will be able to:
		CO1: calculate various types of averages like Mean,
		Median and Mode etc.
		CO2: calculate various measures of dispersion like
		standard deviation, mean deviation, etc. and their uses.
		CO3: analyze data and use it further.
		CO4: calculate the correlation between variables with
		the help of different methods.
		CO5: use the statistical methods in daily life.
		CO6: use the methods to calculate index numbers and
		explain the problems in constructing them.
		CO7: explain derivatives, matrices, set theory, maxima
		-minima and their application in Economics.
MUV0330	Music (Vocal)	On Completion of this course students would be able to:
		CO1: identify Musical terms like Importance of

	Notation system, Murchhana, Gamak, Meend,		
	Bol-Alap, Andolan, Boltana and Badat.		
		CO2: describe about the life history, contributions and	
		achievements of different classical singers and	
		musicians.	
		CO3: describe the importance of Tanpura and Sahayak	
		Nada for practical skills and theoretical	
		knowledge.	
		CO4: sing Drut Khayal with harmonium for practical	
		skills.	
		CO5: sing Aroh, Avroh and Pakar with tanpuraror	
		practical skills.	
		CO6: develop the ability to sing Drut khayal and	
		Vilambit khayal which is the most important and	
		popular form of Hindustani Vocal Music.	
	Political Science		
0334	(Indian Politics)	After the course, the students can:	
		CO1: analyze the Federalism and its Working with	
		reference to Centre-State Relations,	
		CO2: recognise Demand for State Autonomy;	
		Emerging Trends in Indian Federalism.	
		CO3: explain the working of Election Commission,	
		Electoral Process and its Defects and Voting	
		Behavior, Electoral Reforms, Problem of	
		Defection.	
		CO4: analyze the Party System in India: National and	
		Regional Political Parties, Interest and Pressure	
		Groups.	
		CO5: describe the role of Caste, Religion, Language,	
		Regionalism in India, Politics of Reservation,	
		Emerging Trends and Challenges before Indian	
		Political System.	
SEMESTER-V			
	COMPULSORY SUBJECTS		

0401	English	After this course, the students will be able to: CO1: frame excellent pieces of prose and poetry in English and thus learn to appreciate the beauty and communicative power of the Language. CO2: explain about insightful native cultural experiences and situations that help develop human values. CO3: improve their linguistic competence and communicative skills. CO4: develop reading habits and acquire competency in self-learning. CO5: appreciate excellent pieces of prose and poetry in English. CO6: enhance the communication skills of the students enabling them to express themselves in an effective manner. CO7: describe the basics of English grammar. CO8: get an opportunity to delve deep into the world of literature.
0402/0403	Punjabi/History and Culture of Punjab	CO9: describe various literary genres including poetry, prose, drama, and essay in a better way. CO1: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਦਾ ਕਾਵਿ ਦਾ ਅਧਿਐਨ ਕਰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਦੇ ਅਰੰਭਿਕ ਕਵੀ ਜੋ ਕਿ ਸੂਫ਼ੀ ਕਾਵਿ ਨਾਲ ਸੰਬੰਧਿਤ ਹੋ ਕੇ ਵਿਚਾਰਾਂ ਨਾਲ ਇੱਕਾਮਿਕ ਕਰਵਾਇਆ ਗਿਆ ਹੈ।ਇਸੇ ਸਮੇਂ ਹੋਏ ਭਾਰਤ ਕਵੀਆ ਦੀ ਰਚਨਾ ਨਾਲ ਵੀ ਜਾਣ ਪਛਾਣ ਹੁੰਦੀ ਹੈ। ਗੁਰਮਤਿ ਕਾਵਿ ਦੀ ਬਾਣੀ ਦਾ ਅਧਿਐਨ ਵੀ ਇਸ ਵਿੱਚ ਕੀਤਾ ਜਾਦਾ ਹੈ। ਗੁਰਮਤਿ ਦੇ ਸਰੋਕਾਰਾਂ ਦਾ ਅਧਿਐਨ ਕਰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦੀ ਸਮੁੱਚੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ। CO2: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਦਾ ਕਾਵਿਤਾ ਦਾ ਵਾ-ਮੰਡਲ ਧਾਰਮਿਕ ਹੈ। ਗੁਰਬਾਣੀ ਤੇ ਸੂਫੀ ਕਵਿਤਾ ਤਾਂ ਮਨੁੱਖ ਦੇ ਅਧਿਆਤਮਿਕ ਤੇ ਪਾਰਲੌਕਿਕ ਮਸਲਿਆਂ ਨੂੰ ਸਿੱਧਾ ਹੀ ਮੁਖਾਤਿਬ ਹਨ। ਦੁਨਿਆਈ ਪ੍ਰੇਮ ਤੇ ਸਮਾਜਿਕ ਮਨੁੱਖੀ ਸਰੋਕਾਰਾਂ ਦੀ ਬਾਤ ਪਾਉਣ ਵਾਲਾ ਕਿੱਸਾ -ਕਾਵਿ ਵੀ ਮਨੁੱਖ ਦੀ ਅਮਰ-ਆਤਮਾ ਵਿੱਚ ਸਮਾਏ ਮੁੱਲਾਂ ਜਾਂ ਆਦਰਸ਼ਾਂ ਨੂੰ ਹੀ ਸਵੀਕਾਰਦਾ ਹੈ। ਬੀਰ-ਕਾਵਿ ਵਿੱਚ ਪ੍ਰਮੁੱਖਤਾ ਭਾਵੇਂ ਦੁਨਿਆਵੀ ਬੁੱਧਾਂ ਦੇ ਬਿਆਨ ਨੂੰ ਹੈ, ਪਰ

ਉਸ ਵਿੱਚ ਵੀ ਸੂਰਬੀਰਤਾ ਨੂੰ ਮਨੁੱਖ ਆਦਰਸ਼ਾਂ ਤੇ ਧਰਮ -ਆਧਾਰੀ ਮੁੱਲਾਂ ਦੀ ਤਾਬਿਆ ਵਿੱਚ ਹੀ ਰੱਖਿਆ ਗਿਆ ਹੈ। ਇਨ੍ਹਾਂ ਲਹਿਰਾਂ ਦੀ ਕਵਿਤਾ ਨੇ ਸਮਾਜ ਨੂੰ ਨਵੀਂ ਸਭਿਆਚਾਰਕ ਚੇਤਨਾ ਅਤੇ ਕ੍ਰਾਂਤੀਕਾਰੀ ਵਿਚਾਰਧਾਰਾ ਦੇ ਲੜ੍ਹ ਲਾਇਆ। ਇਨ੍ਹਾ ਵਿਚਾਰਾਂ ਤੋਂ ਜਾਣੂੰ ਹੋ ਕੇ ਵਿਦਿਆਰਥੀ ਆਪਣੇ ਜੀਵਨ ਨੂੰ ਸਹੀ ਰਾਹ ਉੱਤੇ ਤੋਰਨ ਦੇ ਯੋਗ ਹੋ ਜਾਂਦੇ ਹਨ।

CO3: ਪੈਰਾ ਰਚਨਾ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨਵੇਂ ਸੰਕਲਪਾਂ ਨੂੰ ਸਿਰਜਣ ਦੀ ਭਾਵਨਾ ਪ੍ਰਬਲ ਹੁੰਦੀ ਹੈ।

CO4: ਲਿਪੀ ਬਾਰੇ ਭਰਪੂਰ ਜਾਣਕਾਰੀ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਪਣੀਆਂ ਲਿਖਤਾ ਨੂੰ ਪ੍ਰਭਾਵੀ ਬਣਾਉਣ ਲਈ ਸਹਾਈ ਹੁੰਦੀ ਹੈ।

CO5: ਵਿਆਕਰਨ ਦਾ ਅਧਿਐਨ ਕਰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਇਸ ਦੇ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ ਬਾਰੇ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।

Punjabi course outcomes translated into English
CO1: While studying the poetry of medieval Punjabi, the
students are introduced to the ideas of early Punjabi
poets who are associated with Sufi poetry. They are
also introduced to the creation of Bharat Kavya which
took place at the same time. The verses of Gurmat
Kavi are also studied in it. While studying the concerns
of Gurmat, the students get an overall knowledge of
Punjab and Punjabi culture.

CO2: The theme of medieval Punjabi poetry is religious.

Gurbani and Sufi poetry directly address the spiritual and mundane issues of man. A story that talks about worldly love and social human concerns - the poet also accepts only the values or ideals embedded in the immortal soul of man. Although the predominance of heroic poetry is the statement of worldly sages, even in that, chivalry is kept in the context of human ideals and religious values. The poetry of these movements brought new cultural consciousness and revolutionary ideology to society.

By knowing these ideas, students can lead their lives
on the right path.
CO3: Through paragraph creation, students develop a sense
of creating new concepts.
CO4: A rich knowledge of script helps students to make
their writing more effective.
CO5: While studying grammar, students get to know about
its theory and practice.
History and Culture of Punjab
After completion of this course, the students will be
able to:
CO1: explain about early British administration; Board
Of Administration 1549-1853; Reforms under
John Lawrence.
CO2: explain about Colonial policy of Agriculture,
Trade and Industry.
CO3: explain about the spread of Modern Education.
CO4: describe about the impact of Socio- Religion
Reform movements i.e. Namdharis, Singh Sabha,
Arya samaj and Ahmediyas.
CO5: explain about the Uprising of 1907; its causes and consequences.
CO6: explain about Ghadar movement, its origin and
Activities.
CO7: explain about Jallianwala Bagh Massacre; its
circumstances and consequences.
CO8: explain about Gurudwara reforms Movement, its
causes & consequences.
CO9: explain about response to Non-Cooperation and
Civil-Disobedience Movement.
CO10: describe about partition of Punjab; its
Circumstances and Impact.
CO11: explain about important historical places on the
outline map of Punjab.

	ELE	ECTIVE SUBJECTS
0407/0405/ 0404	Punjabi/Hindi/English	CO1: ਮੱਧਕਾਲ ਤੇ ਮੁੱਢਲੇ ਬਸਤੀਵਾਲ ਕਾਲ ਦੀ ਪੰਜਾਬੀ ਕਵਿਤਾ' ਪੁਸਤਕ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੇ 1700 ਈ. ਤੋਂ ਲੈ ਕੇ 1900 ਈਂ ਤੱਕ ਦੀ ਕਵਿਤਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਕੀਤੀ।
		CO2: ਵਾਰਿਸ ਸ਼ਾਹ ਦੀ ਕਵਿਤਾ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੇ ਜ਼ਗੀਰਦਾਰੀ ਸਮਾਜ ਵਿੱਚ ਔਰਤ ਦੀ ਦਸ਼ਾ, ਉਸ ਸਮੇਂ ਦੇ ਸਮਾਜ-ਪ੍ਰਬੰਧ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਕੀਤੀ।
		CO3: ਵਾਰਿਸ਼ਸ਼ਾਹ, ਹਾਸ਼ਮ, ਅਹਿਮਦਯਾਰ ਅਤੇ ਫਜ਼ਲ ਸ਼ਾਹ ਦੀ ਕਵਿਤਾ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਗਿਆਨ ਹੋਇਆ ਕਿ ਮੱਧਕਾਲ ਵਿੱਚ ਕੁੜੀਆਂ ਨੂੰ ਬੰਦਸ਼ਾਂ ਵਿੱਚ ਰੱਖਿਆ ਜਾਂਦਾ ਸੀ।
		CO4: ਸ਼ਾਹ ਮੁਹੰਮਦ ਦੀ ਰਚਨਾ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਦੀ ਮੌਤ ਤੋਂ ਬਾਅਦ ਸਿੱਖ ਰਾਜ ਵਿੱਚ ਹੋਈ ਕਤਲੋਗਾਰਤ ਅਤੇ ਸਿੱਖਾਂ ਤੇ ਅੰਗਰੇਜ਼ਾਂ ਵਿਚਕਾਰ ਹੋਈਆਂ ਲੜਈਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੋਈ।
		Punjabi Outcomes translated in English
		CO1: The book Maddkal Te Mudhale Bastiwal Kaal Di
		Punjabi Kavita provided students information
		about the poetry of 1700 AD to 1900AD.
		CO2: Through Waris Shah's poems, students learned
		about the plight of women in the feudal system
		and the social management of that time.
		CO3: The poems of Waris Shah, Ahmadyaar and Fazal
		Shah acquainted the students with the fact that
		the girls were not allowed to express themselves
		and kept in constraints during the medieval
		period.
		CO4: Through Shah Mohammad's works, the students
		got information about the massacre that took
		place in the Sikh state after the death of Moharaia Baniit Singh and the battles fought
		Maharaja Ranjit Singh and the battles fought between Sikhs and the Britishers.
		Detween Sikhs and the Diffushers.
		CO1: Through the play Jin Sach Plai Hoi, the students
		come to know that people were the victim of

	ignorance during the time of Guru Nanak Dev ji.
	They were superstitious. The rulers of that time
	used to commit atrocities upon them. There was
	no religious freedom. Through this play,
	students get to know about the personality of
	Guru Nanak Dev ji and his manner of logical
	talk. Whoever came to his company became
	bold and enlightened. He was freed from all
	superstitions. The students became aware of
	importance and relevance of Guru Nanak Dev
	ji's ideology in the present times.
	Hindi
_	r विद्यार्थी रामधारी सिंह दिनकर के जीवन, रचनाओं, काव्यगत
कुरुक्षेत्र	विशेषताओं और दार्शनिक सिद्धांतों का परिचय प्राप्त करेंगे।
(खण्ड काव्य)	
	r कुरुक्षेत्र एक पौराणिक खण्ड-काव्य है, जिसका मूल स्रोत
	महाभारत है। इस काव्य ग्रंथ में भीष्म पितामह युधिष्ठिर को कर्म
	और कर्त्तव्य का उपदेश देते हैं। इस ग्रंथ में युद्ध और उसकी
	समस्यायों पर गहन विचार किया गया है। युद्ध और शांति जैसे
	विषयों पर प्रकाश डालते हुए दिनकर जी शांति को श्रेष्ठ मानते हैं
	परन्तु जहां शांति अन्याय पर आधारित हो वहां युद्ध को श्रेष्ठ मानते
	हुए उसका समर्थन भी करते हैं। कुरुक्षेत्र के माध्यम से विद्यार्थी
	यह संदेश प्राप्त करेंगे कि अन्याय और अत्याचार पर आधारित शांति
	कभी भी स्थाई नहीं होती और न्याय और अधिकार के लिए लडा
	जाने वाला युद्ध कभी पाप कर्म नहीं होता। इस ग्रंथ में विद्यार्थियों
	को राजतंत्र की निंदा, लोकतंत्र की प्रशंसा और समाजवादी
	विचारधारा को एक साथ देख-समझ कसते हैं।
	r हिन्दी काव्य की शास्त्रीय पद्धति से विद्यार्थियों का परिचय
समीक्षा सिद्धांत	कराया जाएगा। समीक्षा सिद्धांत के महत्व को प्रतिपादित किया
	जाएगा।
	1

r काव्य की परिभाषा

	T
r काव्य का वर्गीकरण	r हिन्दी काव्य की परिभाषा, काव्य के बहु-आयामी वर्गीकरण से
	विद्यार्थियों को परिचित कराया जाएगा।
r महाकाव्य एवं खण्डकाव्य	
	r हिन्दी महाकाव्य एवं खण्डकाव्य के लक्षण, परिभाषा, विशेषताओं
r गीतिकाव्य	और इन दोनों के साम्य-वैषम्य से विद्यार्थियों के ज्ञान में वृद्धि
~ ·	होगी और वे प्राचीन शास्त्रीय काव्य विधाओं से परिचय प्राप्त करेंगे।
r निबंध	
r जीवनी	r हिन्दी गीतिकाव्य काव्य के लक्षण, परिभाषा, विशेषताओं से
r जावना	विद्यार्थियों के ज्ञान में वृद्धि होगी और वे गेय काव्य विधा से
r संस्मरण	परिचय प्राप्त करेंगे।
	r हिन्दी निबंध, जीवनी, संस्मरण और रेखाचित्र जैसी आधुनिक गद्य
r रेखाचित्र	विधाओं के लक्षण, परिभाषा, विशेषताओं से विद्यार्थियों के ज्ञान में
	· ·
	वृद्धि होगी और वे इन विधाओं से परिचय प्राप्त करेंगे।
अलंकार परिचय	
जरायगर गारपप	r हिन्दी काव्य की शास्त्रीय पद्धित से विद्यार्थियों का परिचय
	कराया जाएगा। अलंकार सिद्धांत के महत्व को प्रतिपादित किया
	जाएगा। हिन्दी काव्य में अलंकारों की स्थिति एवं प्रयोग से
	विद्यार्थियों को परिचित कराया जाएगा।
	r हिन्दी काव्य में प्रयुक्त होने वाले अनुप्रास, यमक, श्लेष, उपमा,
	रूपक, उत्प्रेक्षा, प्रतीप, विरोधाभास, अतिश्योक्ति और वक्रोक्ति
	अलंकारों के लक्षण, परिभाषा, प्रयोग आदि से विद्यार्थियों के ज्ञान
	में वृद्धि होगी।
	English
	CO1: explain different genres of Literature by reading
	selected texts and poems.
	CO2: analyze various literary terms prescribed in the
	syllabus.
	CO3: develop a taste for specialized study of Indian
	literature written in the English language.

		CO4: explain the nature and importance of the English
		language in the present world.
		CO5: interpret Indian writing in English.
		CO6: analyze various dimensions of Indian English
		writing in poetry, especially its rustic philosophy.
		CO7: explain various literary terms like Orientalism,
		Postcolonialism, Gender, Race, Class, Caste,
		Nation etc.
		CO8: use language effectively by understanding the art
		of comprehension, note-making, one- word
		substitutes and changing the form of words.
	History	
0425	(World History	After completion of this course, the students will be
0423	1500-1870 A.D)	able to:
	1300-1670 A.D)	CO1: explain the history of the Modern world, World
		·
		Around 1500; Feudalism, Features and its decline.
		CO2: describe about Politico-Religious Changes. CO3: describe about the rise of Parliamentary
		Government; The Glorious Revolution and
		its effects.
		CO4: explain about the American Revolution, Social,
		Political and economic causes, its Consequences.
		CO5: explain about the French Revolution 1789.
		CO6: state the Napoleon Bonaparte, his Reforms and
		his continental system.
		CO7: state about Congress of Vienna 1815, its motives,
		working, principal, provisions and significance.
		CO8: explain about the Industrial Revolution (1750-
		1880), spread to Europe, impact on Society.
		CO9: explain about the Eastern Question Greek War of
		Independence, Mehmat Ali and Egypt, Crimean
		War.
		CO10: explain about the different stages in the
		unification of Italy, role of Mazzini, Cavour and

		Garibaldi.
		CO11: explain about the important historical places of
		the world in the outline map of the world,
		unification of Germany and unification of
		Italy.
	Mathematics	
MAT-0443	(Analysis-I)	After completing the course, students will be able to:
		CO1: describe Countable and Uncountable sets and
		problems related to this topic
		CO2: explain Riemann Integral and Integrality of
		Continuous, Monotonic functions and their
		Applications.
		CO3: explain Theorems like Fundamental theorem
		of Integral Calculus, Mean Value Theorem of
		Integral Calculus and their applications by
		solving various problems.
		CO4: use Beta Gamma Functions, Improper Integrals,
		Comparison Tests to solve Improper Integral.
		CO5: perform Abel's test, Dirichlet's test to solve
		Improper integral, Frullani Integral
		CO6: explain about Continuity and Derivability of an
		Integral of a Function as a Parameter.
MAT-0444	(Modern Algebra)	After completing the course, students will be able to:
		CO1: differentiate and solve theorems of Groups,
		Subgroups, Lagrange's Theorem, Normal
		subgroups Quotient Groups.
		CO2: describe Homeomorphisms, Isomorphism
		theorems and problems related to this concept.
		CO3: analyze Conjugate elements, Class Equations,
		Permutation Groups, and Alternating Groups etc.
		CO4: describe and solve problems of Rings, Subrings,
		Ideals and Integral Domain and problems and
		theorems based on these concepts.
		CO5: differentiate Quotient Rings, Prime and Maximal
		ideals, Homomorphism and Isomorphism based

MAT-0445 (Probability Theory) After completing the course, students will be able to: CO1: describe Probability, Conditional Probability by solving practical problems related to this concept. CO2: solve Random Variables and topics on this field like probability density function, discrete and continuous random variables, Moment Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to: CO1: explain the history of agroforestry,	
solving practical problems related to this concept. CO2: solve Random Variables and topics on this field like probability density function, discrete and continuous random variables, Moment Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	MAT-0445
concept. CO2: solve Random Variables and topics on this field like probability density function, discrete and continuous random variables, Moment Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
CO2: solve Random Variables and topics on this field like probability density function, discrete and continuous random variables, Moment Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
like probability density function, discrete and continuous random variables, Moment Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
continuous random variables, Moment Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Generating Functions, Skewness and Kurtosis. CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
CO3: differentiate Discrete Distributions-Bernoulli, Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Binomial, Negative Binomial, Geometric and Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Poisson Distributions and problems related to these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
these concepts. CO4: apply Continuous Distributions-Uniform, Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
CO4: apply Continuous Distributions-Uniform,	
Exponential, Beta, Gamma, Chi-Square and Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Normal distributions on various problems. CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
CO5: describe and analyze Bivariate Random Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Variables and distribution along with the concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
concepts of joint expectation, correlation coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
coefficient, Bivariate Normal Distribution. Agriculture (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Agriculture O442 (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
O442 (Agrodiversity and Physiology) After the completion of the course, the student will be able to:	
Physiology) able to:	
CO1: explain the history of agroforestry,	0442
agroecological zonification, socioeconomic	
aspects of agroforestry, agroforestry system for	
small holdings arid land agroforestry.	
CO2: describe about the establishment of orchard basis	
cultural practices, elemental role and needs of	
nutrients, propagation – principles and	
techniques, stock –scion relationship and their	
incompatibility, Fruit Physiology	
CO3: describe about the respiration- glycolysis, citric	1
acid cycle, photorespiration, photosynthesis –	
light reaction, dark reaction, C4 –cycle, CAM	
plants growth hormones and their role in	

		agriculture.
		CO4: describe about the enzymes and vitamins,
		vernalization and photoperiodism.
		CO5: explain about intellectual property right,
		informatics in agriculture, seed production and
		technology indigenous technical knowledge in
		agriculture introduction to crop biotechnology
		agrobiodiversity.
0487	Retail Marketing	The students who successfully complete this course will be able to:
		CO1: express the significance of retail branding.
		CO2: elucidate the concept of customer services, its
		significance, levels and quality standards.
		CO3: formulate the Gaps models for improving retail
		customer service quality.
		CO4: state the development and use of Information
		Technology in retailing.
		CO5: comprehend the various concepts of
		consumerism and ethics in retailing.
		CO6: familiarize themselves with practical experience
		of the work related to the retail sector.
	Computer Science	
CS09	(Project Management)	The students after completing this course, will be able to:
		CO1: explain the concepts of Project Management for
		planning to execution of projects, Able to
		understand different phases of SDLC.
		CO2: use the feasibility analysis in Project
		Management and network analysis tools for cost
		and time estimation.
		CO3: describe about Project Directions, Coordination
		and Control, Project Management Performance,
		Report Writing.
CS10	(Relational Database	The students after completing this course, will be able
	Management System)	to:
		CO1: state the basic concepts and the applications of
	l	79

		database systems.
		CO2: retrieve any type of information from a data base
		by formulating complex queries in SQL.
		CO3: describe the relational database design principles
		CO4: explain about Data Constraints, Grouping of data,
	Practical C-Practical	Indexes, Sequences, Pl/SQL Concepts.
PCS05	Based on paper CS10)	The students after completing this course, will be able
1 0.500		to:
		CO1: use the DDL commands, Primary key and
		Candidate keys.
		CO2: apply the various DML commands for retrieval of
		information
		CO3: perform all the Table join operations.
		CO4: develop simple applications using PL/SQL
		procedure, cursor, triggers.
0414	Physical Education	After the course, the students will be able to:
		CO1: follow the Rules and Skills of games.
		CO2: discern the player's Psychology.
		CO3: maintain proper Health and active life style.
		and Know about Hypo-kinetic Diseases, Postural
		deformities and Physical activities.
		CO4: Get knowledge about the tournament or
		competition.
		CO5: describe various theories of play and their
		significance of physical education and sports.
		CO6: Students get knowledge about massage, benifits of
		blood circulation and muscle.
	Fashion Designing	
0477	(Fashion Designing and	After the course, the students can:
	Merchandising) (theory)	CO1: explain the different aspects of fashion.
		CO2: explain the different aspects of merchandising.
		CO3: create Indian and Western designs.

	Economics	
0427	(Economics of	After completing this course students will be able to:
	Development)	CO1: distinguish the concept of 'Economic
		Development' and 'Economic Growth' and
		various theories of Economic Development and
		Growth.
		CO2: analyze the obstacles in economic development.
		CO3: explain the concept of capital formation and
		factors which can increase capital formation.
		CO4: describe the merits and demerits of capital
		intensive and labour intensive techniques of
		production.
		CO5: analyze various factors helpful in the economic
		development of a country.
		CO6: explain the concept of poverty and its
		measurement.
		CO7: describe the role of economic planning in the
		development process.
		CO8: review various stages of economic development.
		CO9: describe the role of economic policies in the
		development of a nation.
MUV0417	Music (Vocal)	On Completion of this course students would be able to:
		CO1: introduce to a specific Gayaki in
		their Khayal singing.
		CO2: learn vilambit khayal in Ragas other those
		Covered during the first year.
		CO3: introduce to the notions of vistar, Bol-Alapa and
		Behelawa; various techniques of improvisation in
		khayal.
		CO4: explain about Badhat in Vilambit khayals.
		CO5: introduce to lok Sangeet of Punjab and stage
		Performance techniques.
		CO6: explain the salient features of Time Theory of the
		Indian Music and focus on Ragas prescribed in

		syllabus.
		CO7: describe about the life history, contributions and
		achievements of different classical singers and
		musicians.
	D 11/1 1 G 1	
0.406	Political Science	
0426	(Comparative Political Systems-UK and USA)	After the course, the students can:
	,	CO1: examine diverse political systems: Liberal-
		democratic, Authoritarian, Socialist forms of
		political systems.
		CO2: explore the Constitution of UK: salient features;
		the executive – the Crown, Prime Minister and
		cabinet; the legislature: House of Lords, House
		Commons, speaker and Committees; Party
		System in UK.
		CO3: appraise the US Constitution: salient features; the
		executive: President; Legislature: Senate. House
		of Representative; Speaker; Judiciary: the
		composition and role of the Supreme Court; Bill
		of Rights; Party System.
		CO4: make a comparative analysis of the following
		institutions of UK and USA: Legislature,
		Executive and party systems
	\$	SEMESTER-VI
	COMP	ULSORY SUBJECTS
0501	English	After the course, the students will be able to:
		CO1: have more grasp over the communicative
		language that will in turn create more job
		opportunities for them.
		CO2: have a better understanding of the texts after
		being familiarised with the analysis,
		interpretation, and understanding of the complex
		interrelationships between authors, texts, and
		specific social, political, and historical contexts.
		CO3: have enhanced literary, critical, and aesthetic
	1	

		awareness of diverse cultures and literary works
		and thus arrive at a broader world vision.
		CO4: have better linguistic competence after learning
		one-word substitution, changing the form of
		words, pair of words, and comprehension.
0502/0503	Punjabi/History and Culture of Punjab	CO1: ਹਰਨਾਮ ਦਾਸ ਸਹਿਰਾਵੀ ਨੇ ਇਸ ਨਾਵਲ ਵਿੱਚ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਦੇ ਜੀਵਨ ਦੀ ਇੱਕ ਲੜੀ ਨੂੰ ਪੇਸ਼ ਕਰਦਿਆਂ ਸਿੱਖ ਇਤਿਹਾਸ ਦੀ ਮਹੱਤਵਪੂਰਨ ਇਸਤਰੀ ਅਨੂਪ ਕੌਰ ਨੂੰ ਚਿਤਰਦਿਆਂ ਉਸਦੀ ਜਵਾਨੀ ਤੇ ਖੂਬਸੂਰਤੀ ਦੀਆਂ ਧੂੰਮਾਂ ਪੈਣ ਕਰਕੇ ਲਹੌਰ, ਸਰਹੰਦ ਤੇ ਮਲੇਰਕੋਟਲੇ ਤੇ ਨਵਾਬਾਂ ਅਤੇ ਉਨ੍ਹਾਂ ਦੇ ਛੋਕਰਿਆਂ ਸਮੇਤ ਰਾਜੇ ਭੀਮ ਚੰਦ ਦੁਆਰਾ ਉਸਨੂੰ ਪ੍ਰਾਪਤ ਕਰਨ ਲਈ ਤਰਲੋਮੱਛੀ ਹੋਣ ਦਾ ਜ਼ਿਕਰ ਹੈ। ਅਨੂਪ ਕੌਰ ਵੱਡੇ-ਵੱਡੇ ਰਿਸ਼ਤਿਆਂ ਨੂੰ ਟੋਕਰ ਮਾਰਕੇ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਨੂੰ ਪਸੰਦ ਕਰਦੀ ਹੈ। ਅਨੂਪ ਕੌਰ ਮਰਦਾਵੇਂ ਭੇਸ਼ ਵਿੱਚ ਸ਼ਸਤਰਧਾਰੀ ਤੇ ਘੋੜ ਸਵਾਰੀ ਸਿੱਘਨੀ ਦੇ ਰੂਪ ਵਿੱਚ ਵਿਚਰਦੀ ਹੈ। ਆਪਣੀ ਸਾਰੀ ਸ਼ਕਤੀ ਗਰੂ-ਪੰਥ ਦੇ ਲੜ ਲਗਾਉਂਦੀ ਹੋਈ ਸ਼ਹੀਦੀ ਪ੍ਰਾਪਤ ਕਰਦੀ ਹੈ।ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਇਸ ਨਾਵਲ ਦੇ ਅਧਿਐਨ ਰਾਹੀਂ ਸਿੱਖਾਂ ਦੁਆਰਾ ਮੁਗਲ ਹਕੂਮਤ ਖਿਲਾਫ ਜੰਗ ਲੜ੍ਹਨ ਅਤੇ ਬਹਾਦਰੀ ਨਾਲ ਮੌਤ ਨੂੰ ਗਲੇ ਲਗਾਉਣ ਦੇ ਇਸ ਕਾਂਡ ਦੀ
		ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ ਆਪਣੇ ਵਿਰਸੇ ਨੂੰ ਜਾਣਨ ਲਈ ਇਹ ਨਾਵਲ ਵਿਦਿਆਰਥੀਆਂ ਲਈ ਬਹੁਤ ਮਹੱਤਵ ਰੱਖਦਾ ਹੈ। CO2: ਅਖਬਾਰਾਂ ਲਈ ਪ੍ਰੈਸ ਨੋਟ ਲਿਖਣ ਦੀ ਰੁੱਚੀ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਪਣੀਆਂ :ਸਾਹਿਤਕ ਰੁਚੀਆਂ ਨੂੰ ਲਿਖਤੀ ਰੂਪ ਦੇਣ ਲਈ ਸਹਾਈ ਹੁੰਦੀ ਹੈ।
		CO3: ਗੁਰਮੁੱਖੀ ਲਿਪੀ ਸਿਰਫ ਸਿੱਖਾਂ ਦੀਆਂ ਧਾਰਮਿਕ ਲਿਖਤਾਂ ਤੱਕ ਹੀ ਸੀਮਤ ਨਹੀਂ ਰਹੀ, ਸਗੋਂ ਇਹ ਇਸ ਤੋਂ ਅਘਾਂਹ ਸਾਤਰੇ ਪੰਜਾਬ ਤੇ ਪੰਜਾਬੀਆਂ ਦੀ ਲਿਪੀ ਬਣ ਗਈ ਹੈ ਇਸ ਸੰਬੰਧ ਵਿੱਚ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜਾਣਕਾਰੀ ਹੋਣੀ ਬੜੀ ਜ਼ਰੂਰੀ ਹੈ।
		ਛੌ4: ਵਿਆਕਰਨ ਦੀ ਜਾਣਕਾਰੀ ਹੋਣ ਤੇ ਹੀ ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਸਾਹਿਤ ਨੂੰ ਸਮਝਣ ਦੀ ਸਮਰੱਥਾ ਹੋਵੇਗੀ। ਉਹ ਸਾਹਿਤਕ ਕਿਰਤਾਂ ਨੂੰ ਸਹੀ ਰੂਪ ਵਿੱਚ ਸਮਝ ਸਕਣ ਦੇ ਯੋਗ ਹੋਣਗੇ।
		Punjabi course outcomes translated into English
		CO1: In this novel, Harnam Das Sehravi presented a series
		of the life of Guru Gobind Singh Ji, portraying Anup
		Kaur, an important woman of Sikh history, who, due

to her youthfulness and beauty, was admired by Lahore, Sarhand, Malerkotle, Nawabs and their sons along with Raje Bhim. Anup Kaur likes Guru Gobind Singh ji because of big relationships. Anup Kaur disguises herself as a man in armour and riding a horse as Sighni. She gets martyrdom with all her strength fighting the Guru-Panth. Through the study of this novel, the students get information about this incident of the Sikhs fighting against the Mughal rule and bravely embracing death. To know their heritage, this novel is very important for students.

- CO2: Interest in writing press notes for newspapers helps students to express their literary interests in writing.
- CO3: The students get the knowledge that the Gurmukhi script is not only limited to the religious writings of Sikhs, but it has become the script of all Punjab and Punjabis.
- CO4: Students have the ability to understand literature only when they know the grammar. They will be able to understand literary works correctly.

History and Culture of Punjab

After completion of this course, the students will be able to:

- CO1: explain about migration and its socio-economic impact, Rehabilitation and Resettlement.
- CO2: explain about Demand for Punjabi Suba; Reorganization Act 1966.
- CO3: explain about the Green Revolution and its impact.
- CO4: explain about Development of education, political and economic Development post 1966.

		CO5: explain about issues of Boundary; water,
		Chandigarh.
		CO6: state about Socio-economic Development in the
		1980's.
		CO7: explain about Operation Blue Star and its impact.
		CO8: explain about New social issues-gender
		discrimination, drug menace.
		CO9: explain about Development of Punjabi
		Literature; Bhai Veer singh, Shiv Kumar Batalvi,
		Amrita Pritam.
		CO10: explain about the important historical places of
		Punjab during after importance.
	ELE	CCTIVE SUBJECTS
0508/0507/	Punjabi/Hindi/English	Punjabi
0504		CO1: ਮੱਧਕਾਲ ਤੇ ਮੁੱਢਲੇ ਬਸਰੀਵਾਦੀ ਕਾਲ ਦੀ ਪੰਜਾਬੀ ਕਵਿਤਾ ਪੁਸਤਕ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੇ ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਵਿਤਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕੀਤੀ।
		CO2: ਵਿਦਿਆਰਥੀਆਂ ਨੇ ਮੱਧਕਾਲ ਵਿੱਚ ਰਚੀ ਗਈ ਕਵਿਤਾ ਦੇ ਵੱਖਰੇ-ਵੱਖਰੇ ਰੂਪਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਕੀਤੀ।
		CO3: ਮੱਧਕਾਲ ਦੇ ਲੋਕ-ਨਾਇਕਾਂ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਕੀਤੀ, ਉਹਨਾਂ ਨੂੰ ਪਤਾ ਲੱਗਿਆ ਕਿ ਪੰਜਾਬ ਦੇ ਲੋਕ ਨਾਇਕ ਅਮੀਰਾਂ ਨੂੰ ਲੁੱਟਕੇ ਕਿਵੇਂ ਗਰੀਬਾਂ ਦੀ ਮਦਦ ਕਰਦੇ ਸਨ।
		CO4: ਨਿਬੰਧ ਪ੍ਰਕਾਸ਼ ਪੁਸਤਕ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਚੰਗਾ ਇਨਸਾਨ ਬਣਨ ਲਈ ਜੋ ਗੁਣ ਚਾਹੀਦੇ ਹਨ, ਉਹਨਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੋਈ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜੀਵਨ ਵਿੱਚ ਕਿਰਤ ਦਾ ਕੀ ਮਹੱਤਵ ਹੈ, ਇਨਸਾਨ ਨੂੰ ਸਾਰਿਆਂ ਦਾ ਭਲਾ ਸੋਚਣਾ ਚਾਹੀਦਾ ਹੈ ਅਤੇ ਵਿੱਦਿਆਂ ਦੀ ਮਹੱਤਤਾ ਆਦਿ ਵੱਖੋ-ਵੱਖਰੇ ਵਿਸ਼ਿਆ ਬਾਰੇ ਜਾਨਣ ਦਾ ਮੌਕਾ ਮਿਲਿਆ।
		Punjabi course outcomes translated into English
		CO1: The study of book Maddkal Te Mudhale
		Bastiwal Kaal Di Punjabi Kavita enables
		students to learn about the poetry of medieval
		period.
		CO2: Students obtained information about the different

	forms of poetry composed in the medieval
	period.
	CO3: Students get information about the folk-heroes of
	the medieval period and how they used to rob the
	rich and help the poor.
	CO1: Through the book Nibandh Prakash, the students
	got information about the qualities required to be
	a good and righteous human being. They got an
	opportunity to learn about various topics like the
	importance of work and education in life and
	ability to think for the welfare of all mankind.
	Hindi
निबंध–लेखन	r विद्यार्थी निबंध-लेखन से अपने लेखन-कौशल को निखार सकेंगे
	और भविष्य में इस कौशल को वे अपने व्यावसायिक जीवन में
	इस्तेमाल कर पाएंगे। किसी भी विषय पर निबंध लिखना सरल नहीं
	होता और इसके लिए निरंतर अत्यास की आवश्यक्ता होती है।
	विद्यार्थी अपने विचारों को निबंध के माध्यम से व्यक्त कर पाने में
	सक्षम हो पाएंगे।
	r विद्यार्थी गद्य-साहित्य के माध्यम से समाज और जीवन की
गद्य-फुलवारी	विविध समस्याओं से अवगत होंगे और उन समस्याओं के समाधान
* * 0 > 0	के लिए प्रेरित होंगे। उनमें समस्या-समाधान की क्षमता विकसित
r आँसुओं की होली	होगी।
r अकेली	
र जनगर॥	r आंसुओं की होली कहानी के माध्यम से विद्यार्थी यह जानने में
r चीफ की दावत	सक्षम होंगे कि कमजोर संकल्प वाले व्यक्ति जीवन के उच्च लक्ष्यों
	को प्राप्त करने में सफल नहीं हो सकते। जीवन में अपने लक्ष्यों की
r सुभान खाँ	पूर्ति के लिए सभी उतरदायित्व निभाने के साथ यह भी जरूरी है कि
-	व्यक्ति कर्मशील हो और उसका संकल्प दृढ़ हो।
r भाभी	
	r अकेली कहानी के माध्यम से विद्यार्थी यह जानने में सक्षम होंगे
r सदाचार का ताबीज	कि अकेलापन एक अभिशाप की तरह होता है, जो मानसिक दु:ख
	की ओर ले जाता है। अतः हमें स्वयं को अकेलेपन से बचाने के
r महात्मा गांधी	लिए सामाजिक होना पड़ेगा और दूसरों के सुख-दु:ख में शामिल

r मैं धोबी हूँ

r गप-शप

r यमुनोत्री की यात्रा

होकर खुद को व्यस्त रखना होगा।

r चीफ की दावत कहानी के माध्यम से विद्यार्थी यह जानने में सक्षम होंगे कि आज के मध्यवर्गीय समाज में कैसे मानसिक्ता और संबन्धों में बदलाव आ रहा है। चमक-दमक और दिखावे की प्रवृति के कारण रिश्तों को घर के फालतू सामान की तरह इधर-उधर छुपाया जाने लगा है। कहानी के अन्त तक आते-आते विद्यार्थी यह समध जाते हैं कि कैसे मध्यवर्गीय लोगों का खून सफेद हो जाता है और वे केवल स्वार्थ में बंधकर घर के बड़े-बुजुगों को भी फालतू सामान समझ लेते हैं, पर यही रिश्ते जाते जाते भी उनको लाभ ही दे जाते हैं।

r सुभान खाँ रेखाचित्र के माध्यम से विद्यार्थी साम्प्रदायिक सद्भाव की जीती-जागती मूरत सुभान दादा से परिचित होकर यह जानने में सक्षम होंगे कि समाज में जातीयता और साम्प्रायिक्ता से बढ़कर इंसानियत और सद्भाव होता है।

r भाभी रेखाचित्र के माध्यम से विद्यार्थी समाज में विधवा की स्थित और नियति के विषय में जानने में सक्षम होंगे। भारतीय समाज में युगों-युगों से विधवा को दबाकर और चारदीवारी में कैद रखा जाता है और उसे लांछित किया जाता है। जरूरत इस बात की है कि उसके साथ भी सामान्य मनुष्य की तरह व्यवहार किया जाए।

r सदाचार का ताबीज पाठ में देश में व्याप्त भ्रष्टाचार तथा उसके उन्मूलन के खोखले रूपों पर कटाक्ष किया गया है। विद्यार्थी यह जानने में सक्षम होंगे कि आधुनिक समाज में व्याप्त भ्रष्टाचार कितना विकराल हो चुका है और नेता देश में जनता की सेवा और प्रगति से बढ़कर निजी स्वार्थ को तरजीहत देते हैं।

r महात्मा गांधी संस्मरण के माध्यम से विद्यार्थी महात्मा गांधी को लेखक की दृष्टि से जानने में सक्षम होंगे। भारत की आजादी में गांधी जी के योगदान, उनके देश के प्रति सेवा भाव और कर्त्तव्य-निष्ठा से विद्यार्थी परिचित होंगे।

r मैं धोबी हूँ निबंध में हल्के-फुल्के ढंग से एक धोबी की कर्त्तव्य-भावना का चित्रांकन करते हुए उसे पतित पावन बताया गया है। विद्यार्थी लेखक के लेखन-कौशल को जानने में सक्षम होंगे और यह जान पाएंगे कि व्यक्ति के गुण-अवगुण उसको समाज में सम्मान या अपमान दिलाते हैं।

r गप-शप निबंध के माध्यम से विद्यार्थी यह जानने में सक्षम होंगे

r गप-शप निबंध के माध्यम से विद्यार्थी यह जानने में सक्षम होगे कि बेकार समझे जाने वाले विषय या बातों से भी कई प्रकार की नयी चीजें सीखी-समझी जा सकती हैं। बेकार समझी जाने वाली बातों से कई बार किसी के व्यक्तित्व और चिरत्र की जानकारी प्राप्त की जा सकती है।

r जमुनोत्री की यात्रा यात्रा-वृतांत के माध्यम से विद्यार्थी यह जानने में सक्षम होंगे कि पुरातन समयों में धार्मिक यात्राओं का क्या महत्व होता था और किन प्रकार की असुविधाओं से यात्री को दो-चार होना पड़ता था।

हिन्दी साहित्य का इतिहास

r आधुनिक गद्य-साहित्य

r विद्यार्थी हिन्दी साहित्य के इतिहास का परिचय प्राप्त करेंगे। विद्यार्थी हिन्दी साहित्य के सृजन की पृष्ठभूमि और साहित्यिक प्रवृतियों को समझने में सक्षम होंगे। विद्यार्थी साहित्य के माध्यम से जीवन-मूल्यों और जीवन-दर्शन को समझने का प्रयास करेंगे।

r हिन्दी साहित्य के आधुनिक काल के अन्तर्गत गद्य साहित्य (कहानी, उपन्यास, नाटक, निबंध, आत्मकथा, जीवनी आदि) की विशिष्टताओं का परिचय प्राप्त करके और इस युग के प्रतिनिधि लेखकों की लेखन शैलियों से परिचित होकर विद्यार्थी आधुनिक काल के साहित्य के विषय में समुचित ज्ञान प्राप्त करेंगे और इस काल-खण्ड के साहित्य की निर्माण प्रक्रिया को समझने में सक्षम होंगे।

छंद-परिचय

r हिन्दी काव्य की शास्त्रीय पद्धित से विद्यार्थियों का परिचय कराया जाएगा। छंद विचार के महत्व को प्रतिपादित किया जाएगा। हिन्दी काव्य में छंदों की स्थिति एवं प्रयोग से विद्यार्थियों को परिचित कराया जाएगा।

r हिन्दी काव्य में प्रयुक्त होने वाले दोहा, रोला, सोरठा, चौपाई, कुण्डलिया, हरिगीतिका, सवैया, इन्द्रवज्रा, उपेन्द्रवज्रा और द्रुतविलम्बित के लक्षण, परिभाषा, प्रयोग आदि से विद्यार्थियों के

	ज्ञान में वृद्धि होगी।
हिन्दी भाषा और उसकी लिपि	r शुद्ध भाषा लिखना एक कला है। अत: यह आवश्यक है कि
r निमंत्रण पत्र	प्रत्येक वाक्य को शुद्ध रूप में पढ़ा/लिखा जाए। आज का युग संचार-क्रांति का युग है। विभिन्न माध्यमों के लिए लेखन कार्य
r विज्ञप्ति/विज्ञापन का प्रारूप	करने से विद्यार्थी आत्मिनर्भर हो सकेंगे। निमंत्रण-पत्र-लेखन, विज्ञप्ति/विज्ञापन-लेखन से विद्यार्थी अपने लेखन-कौशल को
r देवनागरी लिपि	निखार सकेंगे और भविष्य में इस कौशल को वे अपने व्यावसायिक जीवन में इस्तेमाल कर पाएंगे।
	r हिन्दी भाषा को लिखने के लिए देवनागरी लिपि का प्रयोग होता है अत: देवनागरी लिपि के उद्भव और विकास-क्रम के साथ-साथ देवनागरी लिपि की विशेषताओं, सीमाओं और सुधार के उपायों पर चर्चा-परिचर्चा से विद्यार्थी देवनागरी लिपि के विषय में जान सकेंगे।
	English
	CO1: able to analyze the elements of social problems
	through Indian literature in English.
	CO2: achieve a higher level of proficiency in English
	in comparison to that achieved by students
	pursuing compulsory courses in English.
	CO3: describe the various types of literary works and
	literary concepts.
	CO4: pursue the subject at post-graduate level
	Communication Skills in English.
	CO5: improve their Listening, Speaking, Reading and
	Writing skills.
	CO6: build up their confidence for participation in
	placement drives.
	CO7: show better performance in International English
	language testing examinations like TOEFL, and
	IELTS.
	CO8: write a report and essay.

CO9: explain various literary terms related to novels:

Bildungsroman, Picaresque Novel, Gothic,

After completion of this course, the students 1871-1991 A.D) able to: CO1: explain the students to the history of the Modern world in the period of Europe Domination, New imperialism 1871-1 Partition of Africa. CO2: describe about Congress of Berlin 187	
O522 (History of India 1871-1991 A.D) After completion of this course, the students able to: CO1: explain the students to the history of the Modern world in the period of Europe Domination, New imperialism 1871-1 Partition of Africa.	
able to: CO1: explain the students to the history of the Modern world in the period of Europe Domination, New imperialism 1871-1 Partition of Africa.	
CO1: explain the students to the history of the Modern world in the period of Europe Domination, New imperialism 1871-1 Partition of Africa.	will be
Modern world in the period of Europe Domination, New imperialism 1871-1 Partition of Africa.	
Domination, New imperialism 1871-1 Partition of Africa.	ne
Partition of Africa.	ean
	914
CO2: describe about Congress of Rarlin 197	
CO2. describe about Congress of Bernii 187	'8, its
circumstances, Provisions and signific	cance.
CO3: explain about the Triple Alliance of 18	382 and
Triple Entente under Diplomatic Devel	lopment in
Europe.	
CO4: explain about world war 1 st and 2nd.	
CO5: describe about the Paris peace conferen	nce.
CO6: describe about the Russian Revolution	1.
CO7: state about the Nationalism and Comm	nunism in
China, Chinese Revolutions of 1911 ar	nd 1994.
CO8: explain about Modernization of Japan,	, Meji
restoration.	
CO9: explain about the Great Depression of	1929,
spread to Germany, France and Britain	n, it's
impact, Roosevelt's New Deal.	
CO10: explain about the Fascism and Nazisr	m.
CO11: describe about the important historica	al places of
world war 1st and 2nd in the outline	map of
world.	
Mathematics	
MAT-541 (Analysis-II) After finishing this course, students will be a	able to:
CO1: perform double Integration over a Rec	tangle,
bounded area, unbounded regions. Do	uble
integrals as Volumes, change to Polar	
Coordinates.	
CO2: analyse Triple integral in Rectangular	

		Coordinates, Repeated integrals in 3-dimension.
		Change of Variables in a Triple Integral to
		Cylindrical and Spherical coordinates.
		CO3: do Integration of line, surface and find volume by
		using Gauss, Green and Stoke's theorems.
		CO4: apply Sequence and series of Functions and
		Various criteria to solve problems related to
		check the convergence and divergence of Series
		of functions. Taylor's and Able's theorem for
		Power Series.
		CO5: perform Fourier expansion of Monotonic, Even,
		Odd functions, Fourier series in the interval [a,b],
		$[0,2\pi].$
MAT-0542	(Linear Algebra)	After finishing this course, students will be able to:
		CO1: describe Vector space, subspace, algebra of
		Subspace, Linear dependence and independence
		and theorems related to these concepts.
		CO2: analyze Basis and Dimension of a Vector space
		as well as subspace, Direct Sum and
		Complements.
		CO3: apply Linear Transformations, Rank Nullity
		theorem, Use of matrices with this topic, Change
		of Basis.
		CO4: solve Characteristic Roots and Characteristic
		Vectors, Cayley-Hamilton Theorem
		Diagonalizable Operators and Matrices, Minimal
		polynomial of a linear operator.
MAT-0543	(Numerical Analysis)	This course will help students to:
		CO1: apply Bisection, Secant, Regula-Falsi and
		Newtons's Method to solve various types of
		equations and also to find roots of polynomial.
		CO2: solve Interpolation, Lagrange and Hermite
		method, Divided Difference method.
		CO3: solve Numerical Differentiation, Numerical
		quadrature with the help of Newton-Cote's,
		Gauss Quadrature and Chebychev's formula.
		01

		CO4: apply methods to solve Linear Equations and
		ordinary differential Equations.
	Agriculture	
0515	(Insects, Pests and Diseases of Crops)	After the completion of course, the students will be able to:
		CO1: protect plants and crops from diseases and
		describe about biological control, chemical
		control, systemic fungicides, Weedicides,
		Compatibility of various fungicides and
		Weedicides and Rodenticides
		CO2: explain about the diseases of crop plants such as
		wheat, rice, maize, citrus, grapes, cotton,
		vegetables, mustard and groundnut.
		CO3: explain about general account of Insects and
		pests, classification of insects, parts of insect
		body, and control measures of insect pests and
		diseases of crop.
		CO4: explain about the insect and nematode diseases of
		cereal (wheat, maize, rice) crops, oil (sunflower,
		groundnut, mustard) crops, fruit (mango, guava,
		citrus) crops and Vegetable crops.
0594	Retail Marketing	The students who successfully complete this course will be able to:
		CO1: elucidate the significance and process of
		customer relationship management.
		CO2: explain the tools and techniques of Loyalty
		Programmes.
		CO3: state the development of modern international
		retail activity.
		CO4: assess international markets based on their
		political, economic, social and competitive
		environments.
		CO5: design an international marketing strategy for a
		retailer.
		CO6: develop an understanding regarding issues in
		rural markets like marketing environment,
		92

		consumer behavior, distribution channels,
		marketing strategies etc.
	Computer Science	
CS11	(E-Commerce)	Students after completing this course, will be able to:
		CO1: describe the basic business management
		concepts.
		CO2: state about e-commerce, both the technical and
		business aspects.
		CO3: explain the principles and practices of e-
		commerce and its related technologies.
		CO4: state the payment details and security issues.
CS12	(Web Programming)	Students after completing this course, will be able to:
		CO1: describe the fundamental concepts of Internet,
		Internet technologies.
		CO2: differentiate the features of different browsers.
		CO3: develop colorful web pages using tags, bullets
		and alignment on texts.
		CO4: explain the table handling tags, Frames and
		Frameset for designing web pages.
		CO5: explain java script – client-side objects, Event
		handling, built in objects.
		CO6: do programming with PHP.
PCS06	(Practical based on Paper CS12)	Students after completing this course, will be able to:
	Taper CS12)	CO1: develop web pages using HTML, DHTML and
		Cascading Styles sheets.
		CO2: develop a dynamic web pages using JavaScript
		(client side programming).
		CO3: do programming in PHP.
0535	Physical Education	After the course, the students will be able to:
		CO1: follow rules and regulations of different games
		and sports.
		CO2: explain about the Fitness tests.
		CO3: explain about the various games officiating and
		skills.
		CO4: know about career aspects in physical education.

		CO5: explain about the students general physiology
		concept and effects of physical exercise and
		sports training.
		CO6: explain about nervous, excretory, endocrine
		system.
	Fashion Designing	
0576	(Apparel Industry and	After the course, the students can:
	Entrepreneurship Development) (theory)	CO1: get acquainted with Entrepreneurship.
	Development, (meory)	CO2: do Quality control, labeling and packaging.
		CO3: explain about Main centers of trade.
		CO4: use Special purpose machines in Apparel
	(Fashion Designing and	marketing.
	Advance Construction	
	Techniques-Practical)	CO1: follow Drafting techniques.
		CO2: use the techniques of Garment Construction.
		CO3: explain the concept of fitting and pattern
		alteration.
		CO4: design garments.
	(Draping and Advance Construction	
	Techniques-Practical)	CO1: use Drafting and Construction techniques.
	_	CO2: follow drafting Techniques.
		CO3: do Computer aided designing.
		CO4: explain about Fashion illustration.
	Economics	
0517	(Indian Economy)	After completing this course, students will be able to:
		CO1: explain about the economic development of India
		since independence.
		CO2: describe the role of the population in economic
		development.
		CO3: state the reasons for major economic problems
		of India like poverty, unemployment, population
		etc. and various steps taken by Govt.to overcome
		these problems.
		CO4: compare the contribution of different sectors of the

		Indian economy in the GDP.
		CO5: review the role of agriculture, industry and service
		sector in development.
		CO6: describe the various land reforms and economic
		reforms done by the Govt. of India.
		CO7: explain the importance of planning undertaken by
		the government of India, and also various
		achievements and failures of planning in India.
		CO8: compare the changes in foreign trade of India since
		independence.
MUV0529	Music (Vocal)	On Completion of this course students would be able to:
		CO1: learn genres like Tarana in the prescribed ragas.
		CO2: describe the value of Indian Classical Music in
		ancient period (4 th to 13 th centuries).
		CO3: describe the different varieties of the taans
		while extending the Raga.
		CO4: describe the different singing styles like Dhamar,
		Bhajan, Shabad, Thumri.
		CO5: describe about the contributions made to music
		by famous Artists of classical music from their
		biographies.
		CO6: describe about the scope of music as a subject in
		education system, the contribution of Akashvani
		and Doordarshan in musical activities and
		contribution of electrical instruments to music.
		CO7: tune different instruments such as stringed,
		rhythmic and electrical.
	Political Science	
0532	(International Politics-	After the course, the students can:
	Theory and Practice)	CO1: critically analyze the theories of international
		politics.
		CO2: evaluate the concept of power and its changing

nature. Explore the instruments for the
promotion of national interest.
CO3: explain about various dimensions and emerging
issues of international politics.

BACHELOR OF COMPUTER APPLICATION (B.C.A.)

BACHELOR OF CC	DMFUTER AFFLICATION (B.C.A.)
PROGRAMME OUTCOMES (POs)	At the end of the three-year B.C.A. programme the students will be able to:
	PO1: describe, analyze and develop computer
	programs in the areas related to algorithm, web
	design and networking for efficient design of
	computer-based system.
	PO2: work in the IT sector as system engineer,
	software tester, junior programmer, web
	developer, system administrator, software
	developer etc.
	PO3: apply standard software engineering practices
	and strategies in software project development
	using open-source programming environment
	to deliver a quality of product for business
	success.
	PO4: state the nature, scope and application of
	computer and computer languages.
	PO5: develop interdisciplinary approach among the
1	

PROGRAM SPECIFIC OUTCOMES (PSOs)	At the end of the three-year BCA programme the students will be able to:
	PSO1: perform the roles pertaining to computer
	applications and IT industry.
	PSO2: describe each and everything about the
	computers starting from the basics till the end
	of the programme.
	PSO3: develop programming skills, networking
	skills, learn applications, packages,

students.

	programming languages and modern techniques
	of IT.
PSC	04: use programming language such as Java, C++,
	HTML, SQL, etc.
PSC	O5: use and apply various computer applications
	and latest development in IT.
PSC	06: show skills in IT like networking, computer
	graphics, web development, trouble shooting,
	and hardware and software skills.
PSC	07: do jobs like that of a software programmer,
	system and network administrator, web
	designer faculty for computer science and
	computer applications
PSC	08: equip themselves to potentially rich and
	employable field of computer applications.
PSC	09: take up self-employment in Indian and
	global software market.
PSC	010: meet the requirements of the Industrial
	standards.

COURSE OUTCOMES

SEMESTER – I		
COURSE CODE	COURSE NAME	COURSE OUTCOMES
BCA-16-101	English (Compulsory)-A	After completion of this course, student will be able to: CO1: comprehend the poems critically CO2: read the texts analytically like their themes, characters and situations. CO3: improve and develop his/her and writing skills through paragraph writing. CO4: use the Idioms and phrases in their sentences. CO5: transform one type of sentence into other type of sentences through transformation of sentences.
BCA-16-102	Fundamental of	After the completion of this course the student will be

	Mathematical Statistics	able to:
		CO1: describe the basic Statistics, its types, limitations,
		collection methods, organization, graphs, and
		frequency distribution.
		CO2: use measures of Central Tendency-Arithmetic
		Mean, Geometric Mean, Harmonic Mean
		CO3: calculate Median, Mode and Measures of
		Dispersion (Range, Mean Deviation, S.D. for
		continuous and discrete series and their
		Coefficients)
		CO4: perform Correlation Analysis, calculate
		Correlations like Karl Pearson and Scatter
		Diagrams Graphic Method etc. and recall the
		difference among these methods.
		CO5: state the Regression Analysis, its Types,
		Objectives, Regression Lines, Properties, and
		Limitations.
BCA-16-103	Computer	At the end of the course the students will be able to:
	Fundamentals and	CO1: identify computer hardware and peripheral
	Computing Software	devices.
		CO2: use the various software applications.
		CO3: perform file management.
		CO4:create basic documents, worksheets, presentations
		with their properties.
		CO5: use email and recognize email netiquette.
BCA-16-104	Problem Solving	After completing the course the students will be able to
	Through C	CO1: describe the basic terminology used in computer programming
		CO2: recall the different data types in a computer program.
		CO3: explain the structure of c program and design programs involving decision structures, loops and functions.
		CO4: describe the user defined functions, categories of
		function and recursion
		CO5: state about arrays, arrays types, string handling

		function.
		CO6: describe the dynamics of memory by the use of
		pointers.
		CO7: explain the concept pointers, fire handling, input output operations.
BCA-16-105	Lab Based on BCA-16-	At the end of the course the students will be able to
	103	CO1: use computers at user level, including operative systems and programming environments.
		CO2: use computer equipment, including both hardware and software
		CO3: solve the problems properly, achieving an
		implementation that is correct, effective and efficient.
		CO4: identify information needs to solve problems, recovering information and applying it to the resolution.
BCA-16-106	Lab Based on BCA-16-	After completing the course, the students will be able to:
	101	CO1: read, understand and trace the execution of
		programs written in C language.
		CO2: write the C codes for a given algorithms.
		CO3: implement programs with pointers and arrays, perform pointer arithmetic, and use the preprocessor.
		CO4: write programs that perform operations using derived data types.

SEMESTER – II		
COURSE CODE	COURSE NAME	COURSE OUTCOMES
BCA-16-201	English (Compulsory)-B	After completion of this Semester student will be able to: CO1: comprehend the poems critically. CO2: read the texts analytically like their themes, characters and situations CO3: improve and develop his/her and writing skills through paragraph writing.

		CO4: use the Idioms and phrases in their sentences.
		CO5: transform one type of sentence into other type
		of sentences through transformation of sentences.
BCA-16-202	Computer Organization	After the completion of the course the students will be able to:
		CO1: explain about digital computer and their
		fundamental architectures.
		CO2: define the function units of computer architecture
		CO3: explain the Input and Output peripheral devices and their communication with the rest of the computer components.
		CO4: find the various instruction type and addressing modes used for programming
		CO5: describe the functionalities and organization of processor units and their types.
		CO6: explain the basic programming unit and execution
		of instruction
		CO7: use Computer arithmetic algorithm in signed magnitude data with hardware implementation and hardware algorithm.
		CO8: explain about the interrupts and direct memory access.
		CO9: state about memory organization and its hierarchy.
		CO10: use RAM, ROM, COST, SIZE, CACHE and virtual memory and comprehend the need for improving cache perform.
		CO11: describe about different secondary storage
		devices.
BCA-16-203	Fundamentals of Web	After completing the course, the students can:
	Programming	CO1: analyze a web page and identify its elements and attributes.
		CO2: create web pages using HTML and Cascading Styles sheets.
		CO3: build dynamic web pages using JavaScript (client-side programming).
		CO4: create XML documents used in Web Publishing.
		CO5: create XML Schema for data transfer in

		distributed environment.
BCA-16-205	Lab Based on BCA-16- 203	After completing the course, the students can: CO1: develop web pages using HTML, DHTML and Cascading Styles sheets CO2: develop web pages using HTML, DHTML and Cascading Styles sheets. CO3: develop a dynamic web page using JavaScript
BCA-16-206	Lab Based on BCA-16- 204	 (client-side programming). After completing the course, the students can: CO1: develop solutions for a range of problems using objects and classes. CO2: write programs to demonstrate the implementation of constructors, destructors and operator overloading. CO3: apply fundamental algorithmic problems including type casting, inheritance, and polymorphism. CO4: explain about generic programming, templates,
393	Environmental and Road Safety Education	After the course, the students will be able to: CO1: describe about plant and animal distribution patterns in relation to biotic and biotic factors. CO2: explain about essential characteristics underlying Natural ecosystems. CO3: describe about the model population and community-level dynamics. CO4: interpret and present ecological results. CO5: identify Global environmental problems. CO6: explain about Social issues and Environment issue. CO7: describe the significance of road safety. CO8: state about Police-Public relationship, Traffic rule and Traffic signs. CO9: describe about Protective provisions against domestic and sexual violence. CO10: explain about the Protective laws for women.

	CO11: explain about the problem of drugs abuse.
	CO12: describe about the drugs and its effects.
	CO13: describe about the prevention and management
	of drug abuse.

	SEMESTER – III		
COURSE CODE	COURSE NAME	COURSE OUTCOMES	
BCA-16- 301/BCA-16- 302	Punjabi A/History and Culture of Punjab A	Punjabi (sur-sMvydnw) CO1: ਵਿਦਿਆਰਥੀ ਆਧੁਨਿਕ ਕਵਿਤਾ ਤੋਂ ਜਾਣੂੰ ਹੁੰਦੇ ਹਨ। CO2: ਭਾਈ ਵੀਰ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਪੜ੍ਹਾਕੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪ੍ਰਕਿਰਤੀ ਪਿਆਰ, ਰੱਬੀ ਪਿਆਰ ਤੇ ਜ਼ਿੰਦਗੀ ਵਿੱਚ ਖੁਸ਼ ਰਹਿਣ ਦੀ ਪ੍ਰੇਰਨਾ	
		ਮਿਲਦੀ ਹੈ। CO3: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੂਰਨ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਬਾਰੇ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।	
		CO4: ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਧਨੀ ਰਾਮ ਚਾਤ੍ਰਿਕ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਦੇਸ਼ ਪਿਆਰ ਦੀ ਭਾਵਨਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ।	
		CO5: ਮੋਹਨ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਮਾਂ ਦੀ ਮਹੱਤਤਾ, ਦੇਸ਼ ਪਿਆਰ ਤੇ ਜਿੰਦਗੀ ਵਿੱਚ ਸ਼ੰਘਰਸ਼ ਕਰਨ ਦੀ ਭਾਵਨਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ ।	
	CO6: ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਦੇਸ਼ ਦੀ ਵੰਡ ਦੇ ਦੁਖਾਂਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੁੰਦੀ ਹੈ।		
	CO7: ਬਾਵਾ ਬਲਵੰਤ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਜ਼ਿੰਦਗੀ ਵਿੱਚ ਹਮੇਸ਼ਾਂ ਆਸ਼ਾਬੰਦ ਰਹਿਣ ਦੀ ਭਾਵਨਾ ਤੇ ਜੀਵਨ ਦੇ ਮਨੋਰਥ ਬਾਰੇ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।		
		(ਪੰਜਾਬੀ ਕਥਾ ਕਿਤਾਬ)	
		CO1: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸੰਤ ਸਿੰਘ ਸੇਖੋਂ ਦੀ ਕਹਾਣੀ 'ਏਹੁ ਨਿਦੋਸਾ ਮਾਰੀਐ' ਰਾਹੀਂ ਪੰਜਾਬੀ ਕਿਸਾਨਾਂ ਦੀ ਆਰਥਕ ਦਸ਼ਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।	
		CO2: ਸੁਜਾਨ ਸਿੰਘ ਦੀ ਕਹਾਣੀ 'ਸਵਰਗ ਦੀ ਝਲਕ' ਰਾਹੀਂ ਗਰੀਬ ਵਿਰਤੀਆਂ ਦੇ ਜੀਵਨ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੁੰਦੀ ਹੈ।	
		C03: ਸੰਤੋਖ ਸਿੰਘ ਧੀਰ ਦੀ ਕਹਾਣੀ 'ਮਾਮਲਾ' ਰਾਹੀਂ	

ਬੇਜਮੀਨੇ ਕਿਰਤੀਆਂ ਦੀ ਆਰਥਿਕ ਮੰਦਹਾਲੀ ਬਾਰੇ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਹੁੰਦੀ ਹੈ।
CO4: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ ਦੀ ਕਹਾਣੀ 'ਉਜਾੜ' ਰਾਹੀਂ ਪੰਜਾਬੀ ਲੋਕਾਂ ਦੇ ਜੀਵਨ ਵਿੱਚ ਆ ਰਹੀ ਤਬਦੀਲੀ ਬਾਰੇ ਗਿਆਨ ਪ੍ਰਾਪਤ ਹੋਇਆ।
CO5: ਨਵਤੇਜ ਸਿਘ ਦੀ ਕਹਾਣੀ 'ਬਸ਼ੀਰਾ' ਰਾਹੀਂ ਲੋਕਾਂ ਦਾ ਗਰੀਬੀ ਕਾਰਨ ਅਨਪੜ੍ਹ ਰਹਿ ਜਾਣ ਬਾਰੇ ਜਾਣਕਾਰੀ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਹਾਸਲ ਹੋਈ।
CO6: ਦਲੀਪ ਕੌਰ ਟਿਵਾਣਾ ਦੀ ਕਹਾਣੀ 'ਰੱਬ ਤੇ ਰੁੱਤਾਂ' ਬਾਰੇ ਲੋਕਾਂ ਦਾ ਕੁਦਰਤੀ ਸੋਮਿਆਂ ਤੋਂ ਦੂਰ ਰਹਿਣ ਬਾਰੇ ਜਾਣਕਾਰੀ।
lyK ilKx Sbd qy vwk Su`DI
iksy vI ivSy au`qy lyK ilKx, su`D pMjwbI ilKx leI ivAkwrxk inXmW bwry ivsQwr sihq jwxkwrI[
Punjabi course outcomes translated into English
Sur-Savedana
Students become familiar with modern poetry.
CO1: By reading the poetry of Bhai Vir Singh, students
get inspiration to love God and be happy in life.
CO2: The poems of Pooran Singh provide the
information about culture of Punjab to students.
CO3: The poetry of Dhani Ram Chatrik gives birth to
the feeling of patriotism among the students.
CO4: Mohan Singh's poems highlight the importance
of mother, love for country and prepare the
students for the struggle of life.
CO5: Amrita Pritam's poems provide information
about the tragedy of the partition of country.
CO6: Through the poems of Bawa Balwant Singh, one
learns the lesson of being optimistic in life and
understands the purpose of life.
Punjabi Katha
Kitab
Students get the basic information about Punjabi Kahani

- CO1: Sant Singh Sekhon's story Eh Nidosha Mariye makes the students aware of the economic condition of farmers of Punjab.
- CO2: Sujan Singh's story Sawarg Di Jhalak provides information about the life of poor people.
- CO3: Santokh Singh's story Mamla provides information about the economic plight of landless workers.
- CO4: Students got information about the changes which are taking place in the lives of Punjabi people through Kulwant Singh Virk story Ujaarh.
- CO5: Navtej Singh's story Bashira provides the information about the people who fail to become literate because of poverty.
- CO6: Dalip Kaur Tiwana's story Rab Te Rutan makes the people aware of the consequences of ignoring the natural resources.
- Essay Writing and Correction in sentences and words
- Students learn how to write an essay on any topic, how to write correct in Punjabi and rules of grammar and its application.

History and Culture of Punjab:

- CO1: describe about the first civilization of India i.e. Indus Valley Civilization.
- CO2: describe about Vedic age, Growth of Jainism and Buddhism in 6th century B.C. in Punjab.
- CO3: state about the society and culture under Maurayas and Guptas.
- CO4: explain about Cultural Reorientation and development of Sufism.
- CO5: describe about the youngest religion of the world i.e. Sikhism, from Shri Guru Nanak Dev Ji to all ten Gurus.

		CO6: state about martyrdoms in Sikhism.
		CO7: explain about institutional development in
		Sikhism, New policy adopted by Shri Guru Hargobind Sahib Ji and Creation of Khalsa.
		CO8: describe about changes in society in the 18th
		century i,e. Social unrest, emergence of misls and
		institutions: Rakhi, Gurmata, Dal Khalsa.
		CO9: state about society and culture of the people under
		Maharaja Ranjit Singh.
		CO10: describe the physical geographical map of
		Punjab.
BCA-16-303	Information System	After completing the course, the students can:
	Design and Implementation	CO1: state the categories of Information System (IS) and its various operations support systems.
		CO2: use various IS like Accounting System, Inventory Control System and Office Automation System.
		CO3: explain various phases of software development life cycle (SDLC).
		CO4: state the managerial issues related to the
		information systems.
		CO5: analyze a problem and identify and to define the computing requirements appropriate to its solution.
		CO6: evaluate a computer-based information system.
		CO7: assist in the creation of an effective Project plan.
BCA-16-304	Computer Oriented	After completing the course, the students can:
	Numerical Methods	CO1: use Bisectin, Secant, Regula-Falsi and Newton's
		Method to solve various types of equations and
		also to find roots of polynomial.
		CO2: solve Interpolation, Lagrange and Hermite
		method, Divided Difference method.
		CO3: solve Numerical Differentiation, Numerical
		quadrature with the help of Newton-Cote's, Gauss
		Quadrature and Chebychev's formula.
		CO4: find the measures of accuracy, absolute error,

		relative error, computational error etc, relationship between errors. CO5: Solve the Ordinary Differential Equations by using Euler method, Runga-Kutta method.
BCA-16-305	Data Structures	After completing the course, the students can: CO1: state about how data can be stored in memory. CO2: implement arrays and various operations on array. CO3: implement Stacks and Queues and various operations on them. CO4: implement the concept of Linked List. CO5: implement the concept of various types of Trees. CO6: implement various searching and sorting techniques along with their complexity. CO7: implement Graph and Graph traversal techniques.
BCA-16-306	Lab Based on BCA-16-304	At the end of the course, the students can: CO1: derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear and nonlinear equations, and the solution of differential equations. CO2: analyze and evaluate the accuracy of common numerical methods. CO3: implement numerical methods in Computer lab.
BCA-16-307	Lab Based on BCA-16- 305	After completing the course, the students can: CO1: design and analyze the time and space efficiency of the data structure. CO2: identity the appropriate data structure for given problem. CO3: use the applications of data structures.

SEMESTER – IV

COURSE CODE	COURSE NAME	COURSE OUTCOMES
	Punjabi/History and Culture of Punjab	Punjabi (sur-sMvydnw) CO1: ਫੀਰੋਜ਼ਦੀਨ ਸ਼ਰਫ਼ ਦੀਆ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬ ਅਤੇ ਦੇਸ਼ ਪਿਆਰ ਦੀ ਭਾਵਨਾ ਬਾਰੇ ਜਾਣੂੰ ਕਰਵਾਇਆ ਗਿਆ। ਮਾਂ ਕਵਿਤਾ ਰਾਹੀਂ ਮਾਂ-ਪਿਆਰ ਦਾ ਸ਼ੰਦੇਸ਼ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਦਿੱਤਾ।
		CO2: ਨੰਟ ਲਾਲ ਨੂਰਪੁਰੀ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਸਿੱਖ ਧਰਮ ਵਿੱਚ ਕੁਰਬਾਨੀਆਂ ਦੀ ਪਰੰਪਰਾ, ਅਜੌਕੇ ਸਮੇਂ ਵਿੱਚ ਹਿੰਦੁਸਤਾਨ ਦੀ ਹਾਲਤ ਤੇ ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਨਾਲ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਸਾਂਝ ਪੁਵਾਈ।
		CO3: ਸ਼ਿਵ ਕੁਮਾਰ ਦੀਆ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਬਾਰੇ ਵਿਦਿਆਰਥੀ ਜਾਣੂੰ ਹੋਏ
		CO4: ਪਾਸ਼ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਨਕਸ਼ਲਵਾਦੀ ਲਹਿਰ ਬਾਰੇ ਗਿਆਨ ਹਾਸਲ ਹੋਇਆ।
	CO5: ਸੁਰਜੀਤ ਪਾਤਰ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆ ਨੂੰ ਵਰਤਮਾਨ ਸਮੇਂ ਵਿੱਚ ਲਿਖੀ ਜਾ ਰਹੀ ਕਵਿਤਾ ਬਾਰੇ ਗਿਆਨ ਹਾਸਲ ਹੋਇਆ।	
	pMjwbI kQw ikqwb	
	CO1: ਗੁਰਦਿਆਲ ਸਿੰਘ ਦੀ ਕਹਾਣੀ 'ਗਧੀ ਵਾਲਾ' ਰਾਹੀਂ ਵਿਦਿਆਰਥੀ ਮੱਧ ਵਰਗੀ ਲੋਕਾਂ ਦੇ ਸੁਭਾਅ ਪ੍ਰਤੀ ਜਾਣੂੰ ਹੋਏ।	
		CO2: ਰਘਬੀਰ ਢੰਡ ਦੀ ਕਹਾਣੀ 'ਕੁਰਸੀ' ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਨਕਸਲਵਾਦੀ ਲਹਿਰ ਦੌਰਾਨ ਲੋਕਾਂ ਉੱਤੇ ਹੋਏ ਤਸੱਦਦ, ਪੰਜਾਬੀ ਲੋਕ-ਕਲਾਵਾਂ ਦੀ ਹੋ ਰਹੀ ਬੇਕਦਰੀ ਤੇ ਅਮੀਰ-ਗਰੀਬ ਲੋਕਾ ਦੇ ਅੰਤਰ ਬਾਰੇ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਹੋਈ।
		CO3: ਮੋਹਨ ਭੰਡਾਰੀ ਦੀ ਪੁਸਤਕ 'ਬਾਕੀ ਸਭ ਸੁਖ ਸਾਂਦ ਹੈ' ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਲੋਕਾਂ ਦੇ ਸੁਭਾਅ ਬਾਰੇ ਪਤਾ ਲੱਗਿਆ ਜਿਹੜੇ ਅਤਿ ਦੁੱਖੀ ਹੁੰਦੇ ਹੋਏ ਵੀ ਆਖਦੇ ਹਨ ਕਿ 'ਬਾਕੀ ਸਭ ਸੁਖ ਸਾਂਦ ਹੈ'।
		CO4: ਗੁਰਬਚਨ ਭੁੱਲਰ ਦੀ ਕਹਾਣੀ 'ਰੋਹੀ ਬੀਆਬਾਨ' ਰਾਹੀਂ ਸ਼ਹਿਰ ਵਿੱਚ ਇਕੱਲਤਾ ਦੀ ਜ਼ਿੰਦਗੀ ਭੋਗ ਰਹੇ ਲੋਕਾਂ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆ ਨੂੰ ਗਿਆਨ ਹੋਇਆ।
		CO5: 'ਜਿੱਥੋਂ ਸੂਰਜ ਉੱਗਦਾ ਹੈ' ਕਹਾਣੀ ਰਾਹੀਂ ਪਿੰਡਾਂ ਦੇ

- ਅਸਰ ਰਸੂਖ ਵਾਲੇ ਬੰਦਿਆਂ ਦੁਆਰਾ ਲੋਕਾਂ ਨਾਲ ਕੀਤੀਆਂ ਜਾਂਦੀਆ ਵਧੀਕੀਆਂ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜਾਣਕਾਰੀ ਮਿਲੀ।
- CO6: ਵਰਿਆਮ ਸੰਧੂ ਦੀ ਕਹਾਣੀ 'ਪਰਛਾਵੇਂ 'ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ 1947 ਦੀ ਵੰਡ ਦੌਰਾਨ ਹੋਈ ਕਤਲੋਗਾਰਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਮਿਲੀ।
- CO7: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪ੍ਰੈਸ ਨੋਟ ਅਤੇ ਇਸ਼ਤਿਹਾਰ ਦੀ ਸਿਖਲਾਈ ਨਾਲ ਅਖਬਾਰਾਂ ਲਈ ਖ਼ਬਰਾਂ ਭੇਜਣ ਅਤੇ ਇਸ਼ਤਿਹਾਰ ਭੇਜਣ ਦੀ ਮੁਹਾਰਤ ਹਾਸਲ ਹੋਈ, ਜਿਸ ਨਾਲ ਉਹ ਪੱਤਰਕਾਰੀ ਦਾ ਕਿੱਤਾ ਅਪਣਾ ਸਕਦੇ ਹਨ।

Punjabi course outcomes translated in English

- CO1: Firozshahdin Sharaf's poems make the students aware of the feeling of love for Punjab and the country. The message of motherly love has been given to the students through the poem Maa.
- CO2: Nand Lal Noorpuri's poems make the students aware of the tradition of sacrifices in the Sikh religion, the condition of India in present times and the culture of Punjab.
- CO3: Through the poems of Shiv Kumar, students get acquainted with the culture of Punjab.
- CO4: Pash's poems provide the students knowledge about the Naxalite movement.
- CO5: Through the poems of Surjit Patar, students get knowledge about the poems being written in the present time.

Punjabi Katha Kitab

- CO1: Through Gurdial Singh's story Gadhi Wala, students get to know about the behavior of the middle class people.
- CO2: Raghbir Dhad's story Kursi provides the information about the torture of people during the Naxalite movement, the disrespect of Punjabi folk-arts and the difference between rich and poor.

- CO3: Mohan Bhandari's book Baki Sab Sukh Sand provides the information about the nature of Punjabi people who, even when they suffer, say that everything else is fine. CO4: Through Gurbachan Bhullar's story Rohi Biaban, students got to know about the people living in isolation in the city. CO5: The story Jitho Suraj Ugada Hai provides students the information about the abuses done to the people by the influential men of the villages. CO6: The study of Variyam Sandhu's story Parshavein provides students information about the massacre that took place during the partition of 1947. CO7: Students learned the skill of making press notes and forming advertisement for newspapers which would enable them to pursue the profession of journalism. History and Culture of Punjab CO1: describe about Colonial Rule in Punjab i.e. Annexation of Punjab Board of Administration CO2: state about the western education introduced by
 - Britishers.
 - CO3: explain about Agriculture development.
 - CO4: describe about early socio-religious reform in all religions.
 - CO5: describe about Socio-Religious Reform Movement i.e. Arya Samaj, Singh Sabhas and Ahmadiyas.
 - CO6: state about Development of Press and Literature.
 - CO7: describe about the emergence of political consciousness.
 - CO8: describe about the Gurdwara Reform movement i.e Major marchas, Activities of Babbar Akalis.
 - CO9: explain about the freedom struggle i.e. all Monuments.

		CO10: explain about the partition of Punjab and its
		aftermath.
BCA-16-403	Software Project	After completing the course, the students can:
	Management	CO1: develop the software project.
		CO2: develop the methodology of software project.
		CO3: use the tools and techniques of software
		Engineering.
		CO4: verify and validate the problem of software
		programming
		CO5: maintain the quality of software project.
BCA-16-404	Operating System	After completing the course, the students can:
	Concepts and Linux	CO1: describe the basic working process of an operating
		system.
		CO2: explain the importance of process and scheduling.
		CO3: state the issues in synchronization and memory
		management
		CO4: describe the key mechanisms in design of
		operating systems modules.
		CO5: state about process management, concurrent
		processes and threads, memory management,
		virtual memory concepts, deadlocks.
		CO6: check and learn the comparison performance of
		processor scheduling algorithms - produce
		algorithmic solutions to process synchronization
		problems.
		CO7: use the UNIX structure, commands, and utilities.
BCA-16-405	Database Management	After completing the course, the students can:
	System	CO1: explain about DBMS, data models, a schema, E-R
		Diagram, relational database and benefits of
		database.
		CO2: design a good database using normalization,
		decomposition and functional dependency

		CO3: explain the concepts of database architecture,
		client server architecture, parallelism concepts and
		distributed database concepts
		CO4: use indexes, sequences, data integrity, creating
		and maintaining tables and user privileges.
		CO5: apply the basic concepts of PL/SQL programming,
		cursors, triggers, packages, procedures, functions
		and transactions
BCA-16-406	Lab Based on BCA-16-	After completing the course, the students can:
	404	CO1: describe and understand the LINUX file system.
		CO2: write shell scripts in order to perform shell
		programming.
		CO3: explain the text processing utilities, process
		management and system operation of LINUX.
BCA-16-407	Lab Based on BCA-16-	After completing the course, the students can:
	405	CO1: explain the underlying concepts of database
		Technologies.
		CO2: design and implement a database schema for a
		given problem-domain.
		CO3: normalize a database and populate and query a
		database using SQL DML/DDL commands.
		CO4: declare and enforce integrity constraints on a
		Database.

SEMESTER – V		
COURSE CODE	COURSE NAME	COURSE OUTCOMES
BCA-16-501	Computer Networks	After completing the course students will be able to: CO1: differentiate between different Network Models. CO2: use and apply different network technologies. CO3: run a smooth network after getting aware of

		various hardware and software.
		CO4: recall the concept of Communication channel.
		CO5: transmit the data wirelessly.
		CO6: describe the various layers of Network
		architecture.
		CO7: implement the switching techniques.
		CO8: solve the security threats and provide security
		services after getting the knowledge about the
		design issues in network security.
BCA-16-502 Di	screte Mathematics	On completing this course students will be able to:
		CO1: explain about Sets, Subsets, Partition of Sets,
		Minset, Maxset, Basic Set Operations, Venn
		diagrams.
		CO2: describe about Relation and Functions, their
		graphic representation, their properties and types.
		CO3: solve questions related to Recurrence Relation
		with constant coefficients, their Homogenous
		Solutions, Particular Solutions, Total Solutions.
		CO4: solve the practical problems using Graphs and
		Graph Theory and can find shortest path in
		Graphs using different Methods and to solve
		their practical problems.
		CO5: describe the language of Finite State Machines,
		analysis of Algorithms and their Time
		Complexity problems.
BCA-16-503 J	ava Programming	After the completion of the course, the students will be able to:
		CO1: apply the principles and practice of object-
		oriented programming in the construction of
		robust maintainable programs which satisfy the
		requirements.
		CO2: design and implement an application that
		demonstrates their competency with Java syntax,
		structure and programming logic, incorporating
		basic features of the language as well as some

		features from the I/O (Input/output) or GUI
		libraries.
		CO3: use Java Programming language in the
		development of small to medium sized application
		programs that demonstrate professionally
		acceptable coding and performance standards.
BCA-16-504	Web Application Development using	After the completion of the course, the students will be able to:
	РНР	CO1: use the fundamentals of web and develop basic Webpages.
		CO2: use different styles to the webpage elements and
		create, modify and format the contents of webpage with CSS
		CO3: create dynamic, interactive Webpages using
		JavaScript and apply basic controls of elements
		with JavaScript.
		CO4: use JavaScript to validate form entries and study
		the server-side scripting language, PHP
		CO5: develop knowledge of MySQL commands and
		Use PHP to access a MySQL database.
BCA-16-505	Lab Based on BCA-16- 503	After the completion of the course, the students will be able to:
		CO1: explain about the model of object-oriented
		programming and fundamental features of an
		object-oriented language.
		CO2: test, document and prepare a professional looking
		package for each business project.
		CO3: write a computer program to solve specified
		problems and to use the JavaSDK environment to
		create, debug and run simple Java programs.
		CO4: explain and develop programs for inheritance,
		multithreading, applets, exception handling and file handling.
BCA-16-506	Lab Based on BCA-16-	After the completion of the course, the students will be

504	able to:
	CO1: design a basic website using HTML and CSS to
	demonstrate responsive web design
	CO2: implement dynamic Webpages with validation
	using JavaScript objects by applying different
	event handling mechanism
	CO3: use PHP scripts to handle html forms
	CO4: create PHP programs that use various PHP library
	functions
	CO5: develop PHP programs to understand the
	difference between GET & POST Methods
	CO6: implement PHP programs of cookie and session
	CO7: develop simple web application using server side
	PHP and database connectivity using MySQL

SEMESTER – VI		
COURSE CODE	COURSE NAME	COURSE OUTCOMES
BCA-16-601	E-Commerce	After the completion of the course, the students will be able to:
		CO1: explain about e-commerce, its components,
		structure of e-banking, rules and regulations on ecommerce.
		CO2: describe about the technical and business aspects
		of e-commerce.
		CO3: state the principles and practices of e-commerce
		and its related technologies.
		CO4: discuss the trends in e-Commerce and the use of
		the Internet.
		CO5: explain the economic consequences of e-
		Commerce.
BCA-16-602	Application Development using	After the completion of the course, the students will be able to:

	VB.Net	CO1: contrast and compare major elements of the .NET
		Framework and explain how C# fits into the
		.NET platform.
		CO2: analyze the basic structure of a C# application and
		be able to document, debug, compile, and run a
		simple application.
		CO3: create methods (functions and subroutines) that
		can return values and take parameters.
		CO4: demonstrate use of common objects and reference
		types.
		CO5: demonstrate ability to create a C# Windows and
		web application using Visual Studio
BCA-16-603	Computer Graphics and Multimedia	After the completion of the course, the students will be able to:
	Applications	CO1: work and interact, through hands-on experiences,
		to design, develop, and modify electronically
		generated imaginary using a wide range of
		sophisticated graphical tools and techniques.
		CO2: summarize different hidden surface elimination
		algorithms and shading techniques used in
		computer graphics and digital media production
		CO3: apply the basics of computer graphics, different
		display devices and applications of computer graphics.
		CO4: explain about algorithmic development of
		graphics primitives like; point, line, circle, ellipse
		etc.
		CO5: describe about the basic building blocks of
		multimedia and a study about how these blocks
		together with the current technology and tools.
BCA-16-604	Lab Based on BCA-16- 603	After the completion of the course, the students will be able to:
		CO1: demonstrate an understanding of contemporary

		graphics hardware.
		CO2: create interactive graphics applications in C using
		one or more graphics.
		CO3: create interactive graphics applications in C using
		one or more graphics application programming
		interfaces.
		CO4: write program functions to implement graphics primitives.
BCA-16-605	Major Project and Seminar	After the completion of the course, the students will be able to:
		CO1: use languages to code front end and back end of
		software.
		CO2: initiate into the process of designing, coding and
		testing a software module.
		CO3: develop a complete software module.
		CO4: get skilled in applying Software Development
		Cycle to develop a software module.
		CO5: use the techniques, skills and modern engineering
		tools necessary for software development.
		CO6: develop a software product along with its
		complete documentation.
		CO7: meet the requirements of the industry and develop
		skills in presentation and discussion of research
		topics in a public forum.
		CO8: get exposure to a variety of research projects and
		activities in-order-to enrich their academic
		experience.

BACHELOR OF COMMERCE (B.COM.)

PROGRAM OUTCOMES (POs)	After the completion of B.Com. programme, the	
	students will be able to:	
	PO1: do business and recall its implications in the	
	society.	

PO2: get skilled in maintaining accounts.

PO3: get skills of entrepreneurship, law and management.

PO4: identify the avenues of marketing and banking both traditional and modern.

PO5: develop the skills and techniques of communication to be successful in business and personal life.

PO6: improve competency to be eligible and employable in job market.

PO7: recognize different value systems and ethics

PO8: follow moral dimensions and accept responsibility.

PO9: apply their knowledge in the field of Commerce

and Finance.

PROGRAM	SPECIFIC	OUTCOMES
(PSOs)		

After the completion of B.COM. Program, students will be able to:

PSO1: apply the skills gained in the course in the real world.

PSO2: become a Manager, Accountant, Management
Accountant, cost Accountant, Bank Manager,
Auditor, Company Secretary, Teacher,
Professor, Stock Agents, Government
employee and so on.

PSO3: prove themselves in different professional exams like CA, CS, CMA, and UPSC.

PSO4: get skilled in different areas of communication,

decision making, innovations and problem solving in day-to-day business activities.

PSO5: Gain thorough systematic and subject skills within various disciplines of Finance, Auditing and Taxation, Accounting, Management, Communication, Computer, etc.

PSO6: practical skills to work as Accountant,	
Audit Assistant, Tax Consultant, and Computer	
Operator as well as other Financial Supporting	
Services.	
PSO7: get skills related to an Advanced Accounting	
career and apply both quantitative and	
qualitative knowledge to their future careers in	
business.	
PSO8: pursue their higher education and can contribute	
to research in the field of Finance and	
Commerce.	

COURSE OUTCOMES (COs):

		SEMESTER-I
COURSE CODE	COURSE TITLE	COURSE OUTCOME
BCM 101A/BCM 101B	Punjabi/History and Culture of Punjab	After completing the course, the students will be able to:

ਛਪੇ ਇਸ਼ਤਿਹਾਰ ਨੂੰ ਪੜ੍ਹਨ, ਸਮਝਣ ਅਤੇ ਖੁਦ ਲਿਖਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ । ਸਿਲੇਬਸ ਦਾ ਇਹ ਭਾਗ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਰਚਨਾਤਮਕ ਹੁਨਰ ਪੈਦਾ ਕਰਕੇ ਉਨ੍ਹਾਂ ਨੂੰ ਰੋਜ਼ਗਾਰ ਦੇ ਮੌਕੇ ਪ੍ਰਦਾਨ ਕਰਦਾ ਹੈ । ਇਕ ਭਾਸ਼ਾ ਤੋਂ ਦੂਸਰੀ ਭਾਸ਼ਾ ਵਿਚ ਅਨੁਵਾਦ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਅਨੁਵਾਦਕ ਬਣਨ ਦੇ ਮੌਕੇ ਵੀ ਪ੍ਰਦਾਨ ਕਰਦਾ ਹੈ । ਇਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਆਪਣੇ ਕਿੱਤੇ ਨਾਲ ਜੁੜੀ ਸੰਬੰਧਿਤ ਭਾਸ਼ਾ ਨੂੰ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਵਿਚ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।

CO4: ਸ਼ਬਦਾਂ ਅਤੇ ਵਾਕਾਂ ਨੂੰ ਸ਼ੁੱਧ ਕਰਕੇ ਲਿਖਣ ਸਮੇਂ ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨੂੰ ਸ਼ੁੱਧ ਕਰਕੇ ਲਿਖਣ, ਪੜ੍ਹਨ ਅਤੇ ਬੋਲਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ । ਆਪਣੀ ਭਾਸ਼ਾ ਦੀ ਵਾਕ ਬਣਤਰ ਨਿਯਮਾਂ ਨੂੰ ਸਮਝਦੇ ਹਨ । ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਸ਼ਬਦਾਂ ਅਤੇ ਵਾਕਾਂ ਦਾ ਸਹੀ ਉਚਾਰਨ ਕਰਨਾ ਸਿੱਖਦੇ ਹਨ । ਉਨ੍ਹਾਂ ਅੰਦਰ ਆਪਣੀ ਮਾਤ-ਭਾਸ਼ਾ ਨੂੰ ਲਿਖਣ, ਪੜ੍ਹਨ ਅਤੇ ਬੋਲਣ ਦੀ ਰੂਚੀ ਪੈਦਾ ਹੁੰਦੀ ਹੈ ।

Punjabi Course outcomes translated into English

CO1: Through the study of Galiye Chikar Doori Gharu (Autobiography) students gain in-depth knowledge about the life struggle of the writer. Through biography and autobiography where students understand the subtleties of life, they become capable citizens who give the right guidance to society by taking inspiration from the works of intellectuals and writers. This form of literature enables the student class to live with ease and courage after the hardships that come in life. This genre of literature provides opportunities for the student to become a writer/writer by being guided to write about his own life and that of others.

CO2: Students can examine different aspects of life and society from their perspective through essay writing

on various topics and students can write on current issues. The creative skills of students are encouraged.

CO3: While translating an advertisement/advertisement from one language to another language, students can acquire knowledge about the structure, preparation, importance, and various dimensions of

an advertisement/advertisement. Students become

able to read, understand and write advertisements printed in any language. This part of the syllabus provides employment opportunities to the students by developing creative skills in them. Translation from one language to another language also provides opportunities for students to become translators. With this, students can understand the relevant language related to their profession in their mother tongue.

CO4: Students can write, read and speak the Punjabi language in a refined way while writing words and sentences. Understand the sentence structure rules of their language. Learn to pronounce Punjabi

language words and sentences correctly. They develop an interest in writing, reading, and speaking their mother tongue.

History and Culture of Punjab:

- CO1: describe about the first civilization of India i.e. Indus Valley Civilization.
- CO2: describe about Vedic age, Growth of Jainism and Buddhism in 6th century B.C. in Punjab.
- CO3: state about the society and culture under Maurayas and Guptas.
- CO4: explain about Cultural Reorientation and development of Sufism.
- CO5: describe about the youngest religion of the world i.e. Sikhism, from Shri Guru Nanak Dev Ji to all ten Gurus.
- CO6: state about martyrdoms in Sikhism.
- CO7: explain about institutional development in Sikhism, New policy adopted by Shri Guru Hargobind Sahib Ji and Creation of Khalsa.
- CO8: describe about changes in society in the 18th century i,e. Social unrest, emergence of misls and institutions: Rakhi, Gurmata, Dal Khalsa.

		CO9: state about society and culture of the people under Maharaja Ranjit Singh. CO10: describe the physical geographical map of Punjab.
BCM 102	English and Business Communication	After completing this course, students will be able to: CO1: develop an appreciation of Language by broadening their vocabularies. CO2: describe the knowledge of authors and their works prescribed in the book 'Ten Mighty Pen'. CO3: enhance their Communicative skills through Language and Literature. CO4: improve their Writing Skills that are relevant and can empower in real life experiences in Interview and professional fields, in everyday life. CO5: distinguish between formal and informal modes of communication. CO6: write effective business documents (such as notice, advertisement, memos etc. which enables them to think analytically. CO7: state the meaning of business communication and the methods to overcome business communication barriers.
BCM 103	Interdisciplinary psychology for Managers	After the completion of this course student will be able to: CO1: describe the concepts of Human Behavior. CO2: explain the techniques of Human Behavior. CO3: apply the various concepts of Motivation, Leadership and Conflict Management in a business concern.
BCM 104	Business Economics – I	After studying the Business Economics students will be able to: CO1: explain the basic concept of Micro-Economics relevant for Business decision making. CO2: apply the economic principles in Management. CO3: analyze how individual decision maker both the

		consumers and producers, behave in a variety of
		economic environment.
		CO4: describe the working of free market economy.
		CO5: utilize the scarce resources effectively & efficiently
		avoiding the wastage of resources.
		CO6: explain how the prices of different goods and factors
		of production can be determined.
BCM 105	Principles of Financial Accounting	After completing this course, the students will be able to: CO1: describe the meaning of GAAP, Accounting
		concepts and conventions.
		CO2: differentiate between Financial and Cost
		Accounting.
		CO3: express the different concepts of consignment and
		Joint Ventures.
		CO4: apply accounting treatment of sole proprietor and
		partnership.
BCM 106	Commercial Laws	On completion of this course student will be able to:
		CO1: describe the relevance of Law of Contract Act,
		1872.
		10/2.
		CO2: state the legal framework of formation,
		CO2: state the legal framework of formation,
		CO2: state the legal framework of formation, performance, discharge of contract and its
		CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract.
		CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special
		CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special contracts like indemnity, guarantee, bailment,
		CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special contracts like indemnity, guarantee, bailment, pledge and agency. CO4: describe the provisions of Right to Information
		CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special contracts like indemnity, guarantee, bailment, pledge and agency. CO4: describe the provisions of Right to Information Act,
BCM 107	Principles and Practices	CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special contracts like indemnity, guarantee, bailment, pledge and agency. CO4: describe the provisions of Right to Information Act, 2005.
BCM 107	Principles and Practices of Management	CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special contracts like indemnity, guarantee, bailment, pledge and agency. CO4: describe the provisions of Right to Information Act, 2005. CO5: describe the Consumer Protection Act, 1986.
BCM 107	_	CO2: state the legal framework of formation, performance, discharge of contract and its Remedies in case of breach of contract. CO3: apply basic knowledge about entering into special contracts like indemnity, guarantee, bailment, pledge and agency. CO4: describe the provisions of Right to Information Act, 2005. CO5: describe the Consumer Protection Act, 1986. Students after completing this course, will be able to:

		performed by management. CO3: apply the techniques for effective and efficient management. CO4: make and implement decisions in an organization effectively.
		CO5: demonstrate the qualities of a good manager.
		SEMESTER-II
BCM 201A/BCM 201B	Punjabi/History and Culture of Punjab	After the completion of course, the students can:
		ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਰਚਨਾਤਮਕ ਹੁਨਰ ਪੈਦਾ ਕਰਕੇ ਉਨ੍ਹਾਂ ਨੂੰ ਰੋਜ਼ਗਾਰ ਦੇ ਮੌਕੇ ਪ੍ਰਦਾਨ ਕਰਦਾ ਹੈ । ਇਕ ਭਾਸ਼ਾ ਤੋਂ ਦੂਸਰੀ ਭਾਸ਼ਾ ਵਿਚ ਅਨੁਵਾਦ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਅਨੁਵਾਦਕ ਬਣਨ ਦੇ ਮੌਕੇ ਵੀ ਪ੍ਰਦਾਨ ਕਰਦਾ ਹੈ । ਇਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਆਪਣੇ ਕਿੱਤੇ ਨਾਲ ਜੁੜੀ ਸੰਬੰਧਿਤ ਭਾਸ਼ਾ ਨੂੰ ਆਪਣੀ

ਮਾਤ-ਭਾਸ਼ਾ ਵਿਚ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ। Punjabi Course outcomes translated into English CO1: Through the study of Galiye Chikar Door Gharu (Autobiography) students gain in-depth knowledge about the life struggle of the writer. Through biography and autobiography where students understand the subtleties of life, they become capable citizens who give the right guidance to society by taking inspiration from the works of intellectuals and writers. This form of literature enables the student class to live with ease and courage after the hardships that come in life. This genre of literature provides opportunities for the student to become a writer/writer by being guided to write about his own life and that of others. CO2: While writing letters about office, commercial, social and cultural issues, where students can understand the above issues, they acquire information about which authority to approach while solving such issues if necessary. CO3: While reading the punctuation section, students gain knowledge about the punctuation used in their mother tongue and can write, read and speak the Punjabi language in a refined way. Understand the rules of sentence structure of their language. They gain proficiency in their mother tongue by learning to pronounce words and sentences correctly. CO4: Students can acquire knowledge about the structure,

preparation, importance, and its various dimensions

of an advertisement/science while translating advertisement writing, advertisement, and profession related vocabulary into the Punjabi language. Students become able to read,

		understand
		and write advertisements printed in any language.
		History and Culture of Punjab
		Students, after completing this course, will be able to:
		CO1: describe about Colonial Rule in Punjab i.e.
		Annexation of Punjab Board of Administration
		CO2: state about the western education introduced by
		Britishers.
		CO3: explain about Agriculture development.
		CO4: describe about early socio-religious reform in all
		religions.
		CO5: describe about Socio-Religious Reform Movement
		i.e. Arya Samaj, Singh Sabhas and Ahmadiyas.
		CO6: state about Development of Press and Literature.
		CO7: describe about the emergence of political
		consciousness.
		CO8: describe about the Gurdwara Reform movement i.e
		Major marchas, Activities of Babbar Akalis.
		CO9: explain about the freedom struggle i.e. all
		Monuments.
		CO10: explain about the partition of Punjab and its
		aftermath.
BCM 202	English and Business Communication	After the completion of this course, students will be able to:
		CO1: enhance their knowledge and understanding of
		English literature.
		CO2: write précis, short formal reports and captivativing
		CVs.
		CO3: use modern forms of communication in a better
		way.
		CO4: develop the skills of group discussion along with
		speaking skills and cognitive abilities.
		CO5: equip them with skills to participate independently
		in group discussions.
BCM 203	Interdisciplinary E	After the completion of this course student will be able

	Commerce	to:
		CO1: describe about E-commerce and its related concepts.
		CO2: perform in any area of operation related to E-
		commerce and can excel in the field of commerce
		with IT specialization.
		CO3: explain about various types of Electronic payment
		system, cryptography, digital-signatures, Electronic
		data interchange.
BCM 204	Business Economics –	Students will acquire the skill to:
	II	CO1: explain the basic concepts of the distribution and
		modern tools of macro-economic analysis.
		CO2: evaluate the overall performance of the economy
		and helps to understand the functioning of a
		complicated modern economic system.
		CO3: explain many international trade aspects like effects
		of tariff determination of exchange rates, gains from
		international trade.
		CO4: integrate macroeconomic analysis into business
		decisions.
		CO5: describe key macroeconomic variables and their
		behavior, and enable to critically evaluate different
		economics.
BCM 205	Corporate Accounting	After completing this course, the students will be able to:
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CO1: state the meaning of accounting and sources of
		Finance.
		CO2: describe about buyback of shares.
		CO3: analyze the banking and insurance companies.
		CO4: express the redemption of shares and debentures.
BCM 206	Business Laws	After completion of the course, students will be able to:
		CO1: apply basic legal knowledge to business
		transactions.

		CO2: identify the rules of The Sale of Goods Act, 1930
		and rights of an unpaid seller.
		CO3: differentiate between express & implied conditions
		and warranties.
		CO4: handle and minimize the Industrial Disputes and
		promote industrial Peace under Industrial Dispute
		Act, 1947.
		CO5: identify various negotiable instruments and how
		these documents can be used in day-to-day business
		transactions.
		CO6: state the legal provisions of Factories Act 1948.
BCM 207	Human Resource Management	After the completion of this course, student will be able to:
		CO1: state the different aspects of managing human
		resource in organization.
		CO2: recognize various techniques of job analysis and job
		design.
		CO3: describe the concepts of Performance appraisal,
		Internal mobility and transfers
393	Environmental and Road Safety Education	After the completion of course, the students will be able to:
		CO1: describe about plant and animal distribution
		patterns in relation to biotic and biotic factors.
		CO2: explain about essential characteristics underlying
		Natural ecosystems.
		CO3: describe about the model population and
		community-level dynamics.
		CO4: interpret and present ecological results.
		CO5: identify Global environmental problems.
		CO6: explain about Social issues and Environment
		issue.
		CO7: describe the significance of road safety.
		CO8: state about Police-Public relationship, Traffic
		rule and Traffic signs.

		CO9: describe about Protective provisions against
		domestic and sexual violence.
		CO10: explain about the Protective laws for women.
		CO11: explain about the problem of drugs abuse.
		CO12: describe about the drugs and its effects.
		CO13: describe about the prevention and management
		of drug abuse.
		SEMSTER-III
BCM 301	Interdisciplinary	After finishing the course, the students will be able to:
	Issues in Indian Commerce	CO1: explain information regarding investors protection
	Commerce	in India.
		CO2: describe about various stock exchanges and
		commodity exchanges of India.
		CO3: state about the scheme "Make in India".
		CO4: explain FDI & FPI.
		CO5: describe the concept of International Finance and
		the various sources of International Finance.
BCM 302	Cost Accounting	After completing this course, student will be able to:
		CO 1: define the various elements of Cost.
		CO2: use the various methods of pricing material in an
		organization.
		CO3: determine the labor cost by applying the different
		methods.
		CO4: use their knowledge regarding reconciliation of cost
		and financial accounts & service costing in
		industry.
BCM 303	Company Law	After completing this course, the students will be able to:
		CO1: express the meaning, concept and types of
		companies.
		CO2: explain the steps involved in the formation of a
		company.
		CO3: describe various terms related to a company law.
		CO4: follow the provisions of per Companies Act,
		2013.
		128

		CO5: employ the procedure followed in convening
		various types of company meetings.
BCM304	Business Mathematics	After completing the course, students will be able to:
	and Statistics	CO1: apply mathematical and statistical tool in business
		decision.
		CO2: use math in departments of accounting, inventory
		management, marketing, sales forecasting.
		CO3: assess the financial performance of the business.
		CO4: estimate the income and expenditure along with risk
		analysis.
		CO5: maintain Record and manage the business
		operations.
BCM 305	Banking and Insurance	After finishing this course, students will be able to:
		CO1: recall the structure and functions of banking system.
		CO2: explain the functions of RBI including banking
		ombudsman.
		CO3: describe the features, principles of insurance.
		CO4: review the different types of insurance including
		insurance Ombudsman.
BCM 306	Goods and Services Tax (GST)	After the completion of this course student will be able to:
		CO1: describe the concept of indirect tax.
		CO2: compute the assessable value of transactions related
		to goods and services for levy and determination of
		tax liability.
		CO3: calculate tax liability and identify taxable entities.
		CO4: explain the concept of various types of GST (CGST,
		SGST, IGST, UTGST)
		CO5: evaluate the taxation structure before and after the
		implementation of GST, types of taxes under GST,
		eligibility and conditions for taking input tax credit.

		CO6: explain the tax subsumed under CGST And SGST,
		place of supply of goods and services.
	<u> </u>	SEMESTER-IV
BCM 401	Interdisciplinary Security Analysis and Portfolio Management	At the end of the course, students will be able to: CO1: state the meaning and concepts of Securities issued in security market CO2: recall the dealing of securities in market. CO3: differentiate between different stock exchanges CO4: apply different methods of analyzing risk and return.
BCM 402	Advanced Accounting	At the end of this course, students will be able to: CO1: compute value of goodwill & shares CO2: calculate insurance claims CO3: express their knowledge regarding hire purchase accounting. Amalgamation, internal reconstruction, holding companies accounts etc. CO4: apply their knowledge to prepare liquidator final statement at the time of liquidation of company.
BCM 403	Auditing and Secretarial Practice	Students after finishing this course, will be able to: CO1: state the meaning, concept and types of audits. CO2: explain the various terms used in auditing and their statutory requirements.

		CO3: recall various duties and liabilities of an Auditor.
		CO4: discuss the role and responsibilities of a Company
		Secretary.
		CO5: frame an audit report of a company.
BCM 404	Cost Management	After the completion of this course, students will be able to:
		CO1: get acquainted with the various methods of cost
		Determination.
		CO2: apply various tools and techniques of cost control
		CO3: analyze contemporary concepts like: Activity based
		costing, Life cycle costing, Value chain analysis.
BCM 405	Marketing	At the end of this course, students will be able
	Management	CO1: define the basic concepts of marketing.
		CO2: apply their knowledge regarding philosophies,
		process and techniques of marketing in the
		competitive world.
		CO3: relate with the emerging trends in Online marketing;
		e- marketing, mobile marketing and social media
		marketing.
		CO4: apply their knowledge in Pricing Decision,
		Distribution Decisions, Promotion Decisions.
		CO5: use various Promotion Tools while marketing the
		products.
		SEMESTER-V
BCM 501	Income Tax Law	At the end of course, students will be able to:
		CO1: explain the various concepts of Income Tax laws
		in India.
		CO2: determine the residential status of person. CO3: compute income under different heads of income.
		CO3: compute income under different fleads of income. CO4: determine the total income of assesses.
		CO5: recall the various exempted incomes.
BCM 502	Management	Students after completing this course, will be able to:
DCW1 302	TVIANAZONIONI	Students after completing this course, will be able to.

	Accounting	CO1: express the meaning and the concept of
		Management Accounting.
		CO2: analyze the financial statements of a company by
		making Comparative financial statements,
		Common-Size statements and can use Trend
		Analysis.
		CO3: recall the new concepts of Social Accounting,
		Human Resource Accounting, and Price level
		Accounting and Responsibility.
		CO4: do Ratio analysis, make Cash flow and Funds flow
		statements.
BCM 503	Indian Economy	At the end of the course students will be able to:
		CO1: explain the fundamentals of Indian economy.
		CO2: explain about the Indian agriculture, manufacturing,
		services and trade sector.
		CO3: interpret the financial framework, market size,
		Profits and business motives of the country.
		CO4: compare and analyze India's economic position
		compared to the world economy.
		CO5: explain the craft of writing great answers, opinion,
		articles and blogs on economic issues.
		CO5: find economic data, demystify it and extract key
		indicators from it.
BCM 504	Production and Operation Management	After the completion of this course, student will be able to:
		CO1: assess in detail the various concepts of Production
		and Operation Management.
		CO2: analyze concepts like work study and work
		Measurement.
		CO3: keep production process up-to-date.
BCM 505	Entrepreneurship and	At the end this course, students will be able to:
	Small Business	CO1: describe the different concepts of entrepreneurs.
		CO2: analyze the concessions given to men and women entrepreneurs.

		CO3: find the different facilities provided to entrepreneurs. CO4: express the concepts of MSME, Commerce and E-Commerce.	
BCM 506	Financial Markets and Services	At the end of the course, students will be able to: CO1: explain the structure of the traditional and modern financial markets and services. CO2: analyze the concepts related to capital market, money market, and bill market. CO3: describe the Mutual Fund industry and Merchant Banking. CO4: define the role and function of the Financial System in the economy. CO5: outline the participants in the Financial Markets. CO6: take investment decisions in future.	
	SEMESTER- VI		
BCM 601	Direct Tax Laws	At the end of this course, students will be able to: CO1: apply the provisions regarding clubbing, set off and carry forward of losses. CO2: apply their knowledge regarding the various deductions under section 80 while computing total income. CO3: apply their knowledge in the assessment of individual, HUF, AOP&; firm. CO4: explain the various Income Tax Authorities, Procedure of Assessment (Practical aspects of Filing of Return to be stressed), CO5: define Penalties, Deduction & Collection of Tax at Source, Advance Payment of Tax, Appeals & Revision.	
BCM 602	Financial Management	This course will help students in: CO1: expressing the meaning, need and importance of Financial management.	

		CO2: calculating the Time Value of money with different
		techniques.
		CO3: computing the Cost of Debt, Preference Shares,
		Equity Capital and Retained Earnings
		CO4: estimating the Working Capital requirements and its
		management and its role in decision making
		CO5: applying the various techniques used for Financial
		Management.
		CO6: relating the concept and various theories behind
		these techniques.
BCM 603	Issues in Financial Reporting	After the completion of this course, student will be able to:
		CO1: list recent developments in financial reporting.
		CO2: recognize various issues arises in financial reporting
		at national and international level.
		CO3: explain the concepts of Segment reporting, Interim
		reporting, Leases and Intangible assets.
BCM 604	Social and Business	After completion of the course students will be able to:
	Ethics	CO1: explain the relationship between ethics, morals and values at the workplace.
		CO2: explain about the adoption of business ethics by
		organizations.
		CO3: comprehend the ethical implications of business
		policies and decisions.
		CO4: apply ethics at workplace and in the development of
		society.
		CO5: explain about important issues under corporate
		social responsibility.
BCM 605	Operation Research	After finishing this course, students will be able to:
		CO1: recall the different concepts of OR.
		CO2: state the practical applicability of OR techniques in
		different fields.

		CO3: acquire skills to solve the problems of OR. CO4: describe the techniques of OR for problem solving.
BCM 606	Sectoral Aspects of Indian Economy	After finishing this course, students will be able to: CO1: explain about various sectoral aspects of Indian Economy. CO2: analyze agricultural problems and new initiatives towards organic farming. CO3: explain about small scale and large scale industries and their problems. CO4: state the problems of Indian Economy. CO5: explain the role of public and private sector in solving economic problems.

B.SC.

PROGRAM OUTCOMES (POs)	After the program, the students will be able to:
	PO1: demonstrate quality knowledge of Physics,
	Chemistry/Computer Science, Mathematics
	/Agriculture with solid fundamentals to
	understood the global problems.
	PO2: exhibit professional efficiency in different fields
	like Industry, Academics and research etc.
	PO3: apply knowledge to build up small scale industry
	for developing endogenous product.
	PO4: hold professional ethics as employee, entrepreneurs
	in facing the challenges at the global level.
	PO5: employ critical thinking and the scientific
	knowledge to design, carry out, record and analyze
	the results of the experiments.
	PO6: use modern techniques, lab equipment to have
	experiment knowledge about subject.

	PROGRAM SPECIFIC OUTCOMES (PSOs)	After the program, the students will be able to:
		PSO1: explain the basic concepts, fundamental principles,
		and the scientific theories related to various

scientific phenomena and their relevancies in the
day-to-day life.
PSO2: develop scientific attitude and temperament and
give emphasis on the development of experimental
skills, data analysis, calculation, measurements
and also on the limitations and precautions about
the experimental method data and results obtained.
PSO3: Understand the conceptual development of the
subject and its application in emerging areas of
Physics, Chemistry/Computer Science,
Mathematics/Agriculture.
PSO4: describe the scientific theories and its relevance in
present context.
PSO5: enhance experimental skill through experiments in
diverse fields.
PSO6: enhance analytical, technical and practical skills.

COURSE OUTCOMES (COs)

		SEMESTER-I
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
0002/0092	Punjabi/History and Culture of Punjab	Punjabi (ਕਾਵਿ -ਸੁਮੇਲ) CO1: ਕਵੀ ਭਾਈ ਵੀਰ ਸਿੰਘ- ਦੀਆਂ 'ਕਵਿਤਾ' ਪੜ੍ਹਾਕੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਕੁਦਰਤ ਦੀ ਖੂਬਸੂਰਤੀ, ਰੱਬੀ ਪਿਆਰ ਤੇ ਜ਼ਿੰਦਗੀ ਦੇ ਰੱਝਵਿਆਂ ਚੋਂ ਖੁਸੀ ਲੈਣ ਪ੍ਰਤੀ ਅਨੇਕਾਂ ਵਿਧੀਆਂ ਸਮਝਾਉ ਣੀਆਂ। CO2: ਪ੍ਰੋ: ਪੂਰਨ ਸਿੰਘ:- ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀ ਕੁਦਰਤ,
		ਕਿਸਾਨ, ਮਜ਼ਦੂਰ ਤੇ ਮਾਂ- ਬੋਲੀ ਦੀ ਅਹਿਮੀਅਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣੀ। CO3: ਧਨੀ ਰਾਮ ਚਾਤ੍ਰਿਕ- ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਤੇ ਦੇਸ਼ ਭਗਤੀ ਨਾਲ ਜੋੜਨ ਦੀ ਤਜਬੀਜ਼ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨਾਲ ਸਾਂਝ ਪਾਉਦੀ ਹੈ।
		CO4: ਪ੍ਰੋ:ਮੋਹਨ ਸਿੰਘ ਦੀ ਕਵਿਤਾ ਰਾਹੀਂ ਮਾਂ ਬੋਲੀ, ਮਾਂ ਦੇ ਪਿਆਰ ਤੇ ਦੇਸ਼ ਦੀ ਰਾਖੀ ਲਈ ਸਿਪਾਹੀ ਦੇ ਮਨੋਭਾਵਾਂ ਨੂੰ ਬਿਆਨ ਕਰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮਾਂ ਬੋਲੀ ਦੀ ਅਹਿਮੀਅਤ ਬਾਰੇ ਦੱਸਿਆ ਹੈ।
		CO5: ਬਾਬਾ ਬਲਵੰਤ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਜ਼ਿੰਦਗੀ ਦੇ ਹਾਲਤਾਂ ਨਾਲ ਜੂਝਣ ਤੇ ਚੜ੍ਹਦੀ ਕਲਾ ਵਿੱਚ ਰਹਿਣ ਦੀ ਪ੍ਰੇਰਨਾ

ਮਿਲਦੀ ਹੈ। CO6: ਸਿਵ ਕੁਮਾਰ ਬਟਾਲਵੀ ਦੀ ਕਵਿਤਾਂ ' ਬੇਸ਼ੱਕ ਬ੍ਰਿਹਾ ਦੀ ਕਵਿਤਾ ਹੈ ਪਰ ਜਿਉਣ ਦੀ ਪ੍ਰੇਰਨਾ ਤੇ ਅਸਲੀਅਤ ਤੋਂ ਜਾਣੂੰ ਕਰਵਾੳਦੀ ਹੈ। CO7: ਸੂਰਜੀਤ ਪਾਤਰ ਦੀ ਕਵਿਤਾ ' ਜ਼ਿੰਦਗੀ ਦੀ ਅਸਲੀਅਤ ਨੂੰ ਬੜੀ ਸਮਸ਼ਟਤਾ ਨਾਲ ਪੂਗਟ ਕਰਦੀ ਹੈ ਤੇ ਵਿਦਿਆਰਥੀ ਦੀ ਸੋਚ ਨੂੰ ਉਤਸ਼ਾਹਤ ਕਰਦੀ ਹੈ। CO8: ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ ਦੀ ਕਵਿਤਾ ਦੇਸ਼ ਵੰਡ ਤੋਂ ਲੈ ਕੇ ਰਾਜਨੀਤੀ ਦੀਆਂ ਉਲਝਵਾਂ ਨੂੰ ਖੋਲ ਦੀ ਕਵਿਤਾ ਹੈ। CO9: ਐਸ.ਐਸ ਸੀਮਾ ਦੀ ਕਵਿਤਾ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਉਸਾਰੂ ਤੇ ਮੌਜੂਦ ਹਾਲਾਤ ਨਾਲ ਲੋਹਾ ਲੈਣ ਦੀ ਭਾਵਨਾ ਨਾਲ ਭਰਪਰ ਕਵਿਤਾ ਹੈ। Translation into English CO1: By teaching 'poetry' -Sumail Kavi Bhai Vir Singhto the students learn to appreciate nature. CO2: Through the poems of Prof. Puran Singh, to give information about the importance of Nature, farmers, workers, and mother tongue CO3: Punjabi culture and patriotism through the poems of Dhani Ram Chatrik Communicates with students about the practice of connecting with their mother tongue. CO4: Prof. Mohan Singh's poem, Narrates the sentiments of a soldier CO6: The poems of Shiv Kumar Batalvi are of course the poetry of Briha. CO7: Surjit Patar's poem 'The reality of life with great clarity to Expresses and encourages the student's thinking. CO8: Amrita Pritam's poem explores the problems of politics from the partition of the country CO9: The poem of S.S. Seema makes the students aware

of the current situation.

History and Culture of Punjab:

	Ī	
		CO1: describe about the first civilization of India i.e.
		Indus Valley Civilization.
		CO2: describe about Vedic age, Growth of Jainism and
		Buddhism in 6th century B.C. in Punjab.
		CO3: state about the society and culture under Maurayas
		and Guptas.
		CO4: explain about Cultural Reorientation and
		development of Sufism.
		CO5: describe about the youngest religion of the world
		i.e. Sikhism, from Shri Guru Nanak Dev Ji to all
		ten Gurus.
		CO6: state about martyrdoms in Sikhism.
		CO7: explain about institutional development in
		Sikhism, New policy adopted by Shri Guru
		Hargobind Sahib Ji and Creation of Khalsa.
		CO8: describe about changes in society in the 18th
		century i,e. Social unrest, emergence of misls and
		institutions: Rakhi, Gurmata, Dal Khalsa.
		CO9: state about society and culture of the people under
		Maharaja Ranjit Singh.
		CO10: describe the physical geographical map of
		Punjab.
	Physics	
0046	(Mechanics-I)	After the course, the students will be able to:
		CO1: discuss the various coordinate systems and study two
		and three-dimensional coordinate systems.
		CO2: explain various physical quantities and know the
		potential and kinetic energy of particles.
		CO3: explain the various conservation laws and
		symmetries of space and time.
		CO4: explain various forces in nature.
		CO5: explain about motion under central force and
		understand Kepler's laws.
		CO6: describe elastic collision in lab and C.M. system and
		study Rutherford scattering.
	l	138

0047	(Vibrations, Waves	CO1: explain SHM and its energy to know about the
	and EM Theory-I)	pendulum and oscillations.
		CO2: describe Lissajous curves by graphical and analytical
		method.
		CO3: explain the types of oscillators and study damping
		and various damping coefficients.
		CO4: describe the forced mechanical and electrical
		oscillations and study their transient and steady state
		behaviors.
		CO5: explain the power and its variation with driving force
		frequency along with quality factor and Bandwidth.
	(T)	CO6: state about Stiffness, Coupled Oscillators and study
0048	(Electricity and Magnetism-I)	the normal co-ordinate and modes of vibration.
		CO1: describe about gradient, Divergence, Curl and their
		physical significance.
		CO2: explain about Gauss's divergence theorem, Stoke's
		theorem and Green's theorem in a plane.
		CO3: describe about Coulomb's and Gauss's law along
		with their applications.
		CO4: explain about electric potential due to a monopole,
		dipole and quadrupole and acquaint with Poisson's,
		Laplace's equations and the method of electrical
		images.
		CO5: explain about Polarization of matter and Atomic
		Polarizability.
		CO6: explain about Gauss's law in dielectrics and
		understand electric displacement vector.
	Chemistry	
0049	(Inorganic Chemistry	After the course, the students will be able to:
	A)	CO1: give details of Atomic Structure with special
		reference to de Broglie matter waves, Heisenberg

		uncertainty principle, atomic orbitals, quantum
		numbers, shapes of orbitals.
		CO2: recognize electronic configurations of the elements
		and ions and related principles.
		CO3: define the arrangement of elements in the periodic
		table and the periodic properties.
		CO4: explain Chemistry of Noble Gases and s-Block
		Elements.
		CO5: identify the nature of chemical bond as well as the
		existence of special types of compounds through
		weak chemical forces and related concepts.
0050	(Organic Chemistry	Students will be able to:
	A)	CO1: explain the nature of bonding involved in organic
		compounds.
		CO2: describe the types and mechanisms of reactions in
		organic chemistry.
		CO3: predict about reaction intermediates involved in
		organic reactions.
		CO4: explain about different techniques used or
		determination of reaction mechanism.
		CO5: express the chemistry of Alkanes and Cycloalkanes.
		CO6: illustrate basics of stereochemistry such as types of
		representation of 3-D structures, enantiomers,
		diastereoisomers, racemic mixtures, resolution and
		geometrical isomerism and conformational
		isomerism.
	(Physical Chamistry	
0051	(Physical Chemistry A)	Students will be able to:
		CO1: analyze mathematical Concepts and evaluation of
		Analytical Data.
		CO2: explain about kinetic theory of gases, deviation from
		ideal behavior, Van der Waal's equation.
		CO3: express critical phenomena and molecular velocities
		of Gaseous state.
		or Subcoup state.

theory and transition state theory. CO6: explain about Homogenous catalysis, acid base and enzyme catalysis including their mechanism. Students will be able to: CO1: qualitatively analyze, separate and identify the different cations and anions from Groups I, II, IV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid.			CO4: explain the kinetics of chemical reactions including
theory and transition state theory. CO6: explain about Homogenous catalysis, acid base and enzyme catalysis including their mechanism. Students will be able to: CO1: qualitatively analyze, separate and identify the different cations and anions from Groups I, II, IV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. MAT-0043 Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			their factors affecting their rate.
CO6: explain about Homogenous catalysis, acid base and enzyme catalysis including their mechanism. Students will be able to: CO1: qualitatively analyze, separate and identify the different cations and anions from Groups I, II, IIV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution of titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. MAT-0043 Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			CO5: describe the importance and limitations of collision
enzyme catalysis including their mechanism. Students will be able to: CO1: qualitatively analyze, separate and identify the different cations and anions from Groups I, II, IIV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution ittrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			theory and transition state theory.
(Laboratory Practicals) Students will be able to: CO1: qualitatively analyze, separate and identify the different cations and anions from Groups I, II, IV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution of titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. MAT-0043 Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			CO6: explain about Homogenous catalysis, acid base and
(Laboratory Practicals) CO1: qualitatively analyze, separate and identify the different cations and anions from Groups I, II, IIV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. MAT-0043 Mathematics (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			enzyme catalysis including their mechanism.
Practicals) different cations and anions from Groups I, II, I IV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titratin it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution of titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titratin it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			Students will be able to:
Practicals) different cations and anions from Groups I, II, I IV, V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in		(Laboratory	CO1: qualitatively analyze, separate and identify the
V and VI present in a salt. CO2: explain about quantitative analysis involving volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in		`	different cations and anions from Groups I, II, III,
volumetric titrations like acid-base, KMnO4 and K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution it itrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			
K2Cr2O7. CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			CO2: explain about quantitative analysis involving
CO3: determinate strength of Na2Co3 solution by titrating it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			volumetric titrations like acid-base, KMnO4 and
it against a standard solution of HCl. CO4: determinate molarity of KMnO4 solution of titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			K2Cr2O7.
CO4: determinate molarity of KMnO4 solution it titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			CO3: determinate strength of Na2Co3 solution by titrating
titrating it against a standard solution of Oxalic acid. CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			it against a standard solution of HCl.
CO5: standarise the given K2Cr2O7 solution by titrating it against a standard solution of Mohr's Salt. Mathematics (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			CO4: determinate molarity of KMnO4 solution by titrating
it against a standard solution of Mohr's Salt. Mathematics (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			it against a standard solution of Oxalic acid.
Mathematics MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			CO5: standarise the given K2Cr2O7 solution by titrating it
MAT-0043 (Plane Geometry) After completing the course, students will be able to: CO1: analyze the concept of transformation of axes in			against a standard solution of Mohr's Salt.
CO1: analyze the concept of transformation of axes in		Mathematics	
	MAT-0043	(Plane Geometry)	After completing the course, students will be able to:
CO2: describe the pair of straight lines, condition of			CO2: describe the pair of straight lines, condition of
parallelism and perpendicularity, joint equation of angle bisectors.			
CO3: solve the problems related to the concepts of			
circle and properties of circle, chord of contact,			
radical axis, co- axial family of circles, limiting			
points.			
CO4: discriminate about tangents, normals and their			CO4: discriminate about tangents, normals and their
properties.			properties.

		CO5: calculate the properties of ellipse, Conjugate
		diameter of ellipse, hyperbola, asymptote and
		rectangular hyperbola.
		CO6: identify conics in general second degree
		equations.
		CO7: examine the general equations of second
		degree, tracing of ellipse, hyperbola and parabola
		and also get to know about the conics. They get
		to know whether a given second degree equation
		is a hyperbola or ellipse or parabola.
MAT-0044	(Calculus-I)	After completing the course, students will be able
		to:
		CO1: describe fundamental concepts of real numbers.
		CO2: solve the problems of Indeterminate forms and
		L'Hospital's Rule to find their limits
		CO3: verify the value of the limit of a function at a
		point using the definition of the limit.
		CO4: examine whether function is continuous or not,
		understand the consequences of the intermediate
		value theorem for continuous functions.
		CO5: apply various general Theorems like Rolle's
		Theorem, Lagrange's theorem, Cauchy Mean
		Value theorem, Taylor's theorem and their
		geometrical interpretation.
		CO6: analyze Hyperbolic and inverse hyperbolic
		functions, Successive differentiation and
		Leibnitz's theorem.
	(Trignometry and	
MAT-0045	Matrices)	After completing the course, students will be able
		to:
		CO1: operate methods to solve the equations
		CO2: recognize consistent and inconsistent system of
		linear equations by using row and column
		echelon form of the augmented matrix.
		CO3: solve linear equation using matrix method.
		142

		CO4: apply Cayley Hamilton Theorem for finding the
		inverse of matrix.
		CO5: describe rank, Linear independence and
		dependence of matrices.
		CO6: appraise the importance of roots of real and
		complex polynomials.
		CO7: apply the applications of De Moivre's theorem to
		solve numerical problems.
		CO8: check diagonalisibility of matrices by finding
		Eigen values and vectors.
		CO9: calculate Hermitian and skew Hermitian matrices
		and their properties.
	Computer Science	
CS01	(Computer Fundamentals)	The students after completing this course, will be able
	,	to:
		CO1: identify the components of a personal computer system.
		CO2: do conversions in basic computer terminology.
		CO3: describe the basic hardware peripherals.
		CO4: describe the memory management.
		CO5: state the different types of software.
		CO6: explain about the operating system and its types.
CS02	(PC Software)	The students after completing this course, will be able
		to:
		CO1: solve common problems related to operating systems.
		CO2: use word processing, Spreadsheet and
		Presentation Graphics Software skills.
		CO3: compose, format and edit a word document,
		Excel, Presentation Slides.
PCS01	(Practical Based on Paper CS02)	The students after completing this course, will be able to:
		CO1: state the working of Input and output devices.
		CO2: run Internal and external DOS commands.
		CO3: create Word, Excel, Presentation files and apply
[l	1/12

		various commands on it.	
	Agriculture		
0015	(Basics of Agricultural Botany and Forestry	After the completion of the course, the students will be able to:	
		CO1: explain about the plant morphology - root, stem,	
		leaf -their types and modifications.	
		CO2: explain about the Inflorescence - types and	
		classification.	
		CO3: explain about flower parts and their functions.	
		CO4: describe about fruit - Types and classification.	
		CO5: state about pollination - types, significance,	
		emasculation, techniques, mode of reproduction	
		and their significance Life cycle of a typical	
		angiosperm.	
		CO6: get skilled in plant breeding, introduction to self	
		Incompatibility.	
		CO7: explain about the cultivation practices including	
		Soil requirements, water requirements, and	
		improved varieties of the region for: Cereals	
		(wheat, rice, maize), Fibres (cotton, Jute), oil	
		Crops (sarson, soyabean), Fruits (mango, grapes,	
		citrus, sapota).	
		CO8: explain the importance of forests, important	
		forest trees of India and status of forestry in	
		Punjab, its significance. Raising of Nurseries	
		for forestry. Social forestry: Definition, concept	
		and its significance.	
SEMESTER-II			
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES	
0102/0192	Punjabi/History and	Punjabi (12 ਕਹਾਣੀਆਂ ਦਾ ਸੁਮੇਲ)	
	Culture of Punjab	C01: ਕਥਾ - ਕਿਤਾਬ': ਪਹਿਲੀ ਕਹਾਣੀ 'ਪੁਹਤਾ ਪਾਂਧੀ' ਗੁਰਬਖਸ਼ ਸਿੰਘ ਪ੍ਰੀਤ ਲੜੀ ਦੁਆਰਾ ਲਿਖੀ ਗਈ ਹੈ। ਇਸ ਵਿੱਚ ਮੇਜਰ ਸਾਹਿਬ ਦੇ ਸੁਭਾਅ ਦੇ ਸੁਲੀਕੇ, ਬੋਲ ਚਾਲ ਤੇ ਦੂਸਰਿਆਂ ਦੇ ਕੰਮ ਆਉਣ ਬਾਰੇ ਦੱਸਿਆ ਹੈ।	
		C02: ਪ੍ਰਿੰ: ਸੁਜਾਨ ਸਿ [°] ਘ ਦੀ ਕਹਾਣੀ 'ਬਾਗਾਂ ਦਾ ਰਾਖਾ' ਕਹਾਣੀ	

ਵਿੱਚ ਕਵਿਤਾ ਕਾਮਿਆ ਦੀ ਅਪਮਾਨ ਜਨਕ ਸਥਿਤੀ ਦਾ ਵਰਣਨ ਕੀਤਾ ਹੈ।

CO3: ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਚਕ ਦੀ ਕਹਾਣੀ ' ਧਰਤੀ ਹੇਠਲਾ ਬਲਦ। ਮਾਝੇ ਦੇ ਲੋਕ ਮੁਸੀਬਤਾਂ' ਭਰੀ ਜ਼ਿੰਦਗੀ ਵਿੱਚ ਜ਼ਿੰਦਗੀ ਨੂੰ ਜਿਉਣਾ ਜਾਣਦੇ ਹਨ।

CO4: ਸੁਖਵੰਤ ਕੌਰ ਮਾਨ ਦੀ ਕਹਾਣੀ 'ਚੱਟੂ' 1947 ਦੀ ਭਾਰਤ ਪਾਕ ਵੰਡ ਦੇ ਉੁਜਾੜੇ ਦੇ ਦੁੱਖਾਂ ਤਕਲੀਫਾਂ ਦਾ ਵਰਨਣ ਕੀਤਾ ਹੈ।

CO5: ਗੁਲਜ਼ਾਰ ਸਿੰਘ ਸੰਧੂ ਦੀ ਕਹਾਣੀ ਠੱਗੀ' ਵਿੱਚ ਮੌਤ ਦੀ ਉਡੀਕ ਰਹੇ ਨਿਰਾਸ਼ ਮਨੁੱਖ ਦੁਆਰਾ ਇਸ ਨੂੰ ਸਮੂਹਿਕ ਹੋਣੀ ਵਜੋਂ ਭੋਗਣ ਵਿੱਚ ਤੱਸਲੀ ਅਨੁਭਵ ਕਰਨਾ ਹੈ।

CO6: ਮੋਹਣ ਭੰਡਾਰੀ ਦੀ ਕਹਾਣੀ 'ਘੋਟਣਾ' ਨਵੀ ਉਦਯੋਗਿਕ ਸਭਿਅਤਾ ਦੇ ਲਿਹਾਜੇ ਹੋਏ ਹੂਨਰਮਦ ਮਨੁੱਖ ਦੀ ਪੀੜ ਤੇ ਲੋਚਾ ਦਾ ਕਰੁਣਾਮਈ ਚਿਤਰਨ ਹੈ।

CO7: 'ਬੱਚੇ ਦੀ ਸ਼ਰਾਰਤ' ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼ ਦੀ ਰਚਨਾ ਹੈ। ਔਰਤ ਮਨ ਦੇ ਵੇਗਾਂ, ਤਰੰਗਾਂ, ਇਛਾਵਾਂ ਦੁਵਿਧਾਵਾਂ, ਚਲਾਕੀ, ਸਿਆਣਪਾਂ ਤੇ ਖੁਆਰੀਆਂ ਨੂੰ ਵਿਅੰਗਮਈ ਅੰਦਾਜ਼ ਵਿੱਚ ਪੇਸ਼ ਕੀਤਾ ਹੈ।

CO8:. 'ਵਰਿਆਮ ਸੰਧੂ' ਦੀ ਕਹਾਣੀ ' ਚੌਥੀ ਕੂਟ' ਪੰਜਾਬ ਦੇ ਅੱਜ ਕੱਲੁ ਦੇ ਵਾਤਾਵਰਨ ਨੂੰ ਵਿਸ਼ਾ ਬਣਾਇਆ ਹੈ।

CO9: ਜਗਜੀਤ ਬਰਾੜ ਦੀ ਕਹਾਣੀ' ਚਿੱਟੀ ਕਬੂਤਰੀ' ਦਾ ਵਿਸ਼ਾ ਗੋਰੀ ਨਸਲ ਦੀ ਇਸਤਰੀ ਪ੍ਰਤੀ ਆਕਾਸ਼ਣ, ਦੋਗਲਾ ਰੱਵਈਆ ਤੇ ਨੀਵੀ ਸੋਚ ਹੈ।

CO10: ਕਿਰਪਾਲ ਕਜ਼ਾਕ ਦੀ ਕਹਾਣੀ 'ਗੁੰਮਸ਼ੁਦਾ' ਵਿੱਚ ਕਾਮ ਰੁਚੀਆਂ ਨਾਲ ਕੀਤੀ ਖਿਲਵਾੜ ਕਾਰਨ ਮਨੁੱਖੀ ਜੀਵਨ ਵਿੱਚ ਮਚੀ ਉਥਲ- ਪੁਥਲ ਹੈ।

CO11: ਜਸਵਿੰਦਰ ਸਿੰਘ ਦੀ ਰਚਨਾਂ 'ਖੂਹ-ਖਾਤੇ' ਵਿੱਚ ਵਰਤਮਾਨ ਸ਼ਹਿਰੀ ਮਨੁੱਖ ਦੇ ਦੂਜਿਆਂ ਜਿਥੋਂ ਤੱਕ ਆਪਣਿਆਂ ਪ੍ਰਤੀ ਸੁਆਰਥੀ, ਕੋਰੇ, ਮੌਕਾ ਪ੍ਰਸਤ, ਸ਼ੱਕੀ ਤੇ ਅਕ੍ਰਿਤਘਣ ਰਵੱਈਏ ਦੇ ਦੀ ਝਲਕ ਪੇਸ਼ ਕਰਦੀ ਹੈ।

CO12: ਬਲਵਿੰਦਰ ਗਰੇਵਾਲ ਦੀ ਰਚਨਾਂ ਮੋਹ- ਪਾਸ ਦਾ ਵਿਸ਼ਾ ਸਮਾਜ ਵਿੱਚ ਬਦਲੇਖੋਰੀਆਂ ਅਤੇ ਸੁਆਰਥ ਵਿੱਚ ਫਸੇ ਲੋਕਾਂ ਦੀਆਂ ਸੋਚਾਂ, ਸਾਜ਼ਿਸਾਂ ਤੇ ਕਾਰਜਗਾਰੀਆਂ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਸਾਹਮਣੇ ਪੇਸ਼ ਕਰਦਾ ਹੈ।

ਵਿਆਕਰਨ: ਮੁਹਾਵਰੇ, ਪ੍ਰੈਸੀ ਰਚਨਾ, ਲੇਖ ਰਚਨਾ, ਧੁਨੀ ਗ੍ਰਾਮ, ਪਰਿਭਾਸ਼ਾ, ਖੰਡੀ ਤੇ ਅਖੰਡੀ ਧੁਨੀਆਂ ਧੁਨੀਆਂ, ਲਗਾਮਾਤਰਾਵਾਂਦੀ ਢੁੱਕਵੀ ਜਾਣਕਾਰੀ ਦੇਣੀ।ਵਿਆਕਰਨ ਹਰੇਕ ਭਾਸ਼ਾ ਦੀ ਰੀੜ ਦੀ ਹੱਡੀ ਹੁੰਦੀ ਹੈ। ਭਾਸ਼ਾ ਸਮਝਣ ਲਈ ਵਿਦਿਆਰਥੀਆਂ ਲਈ ਇਸ ਦਾ ਗਿਆਨ ਜਰੂਰੀ ਹੈ ਜੀ।

Translated into English

CO1: Katha - Kitab': First story 'Puhta Pandhi' by
Gurbaksh Singh portrays major sahib's character.

CO2: Kavita Kamiya in the story 'Baagan Da Rakha' by Sujan Singh described a humiliating situation.

CO3: Kulwant Singh Virak's story 'The Bull under the Earth' tell the people of Punjab know how to live life to the fullest. CO4: Sukhwant Kaur Mann's story 'Chattu' is about the sufferings of the 1947 partition of India and Pakistan. CO5: In Gulzar Singh Sandhu's Kahani Thaggi' is a despondent man waiting for death. CO6: Mohan Bhandari's story 'Ghotna' was brought about by the new industrial civilization CO7: 'Bachche Di Shararat' is a work of Prem Prakash that presents the experience in a satirical way. CO8: The story of 'Varyam Sandhu' 'Chauthi Koot' to presents the period of terrorism Punjab. CO9: The subject of Jagjit Brar's story 'Chitti Kabutri' is about a white woman. CO10: Kirpal Kazak's story 'Gumushoda' plays with lust due to the upheaval in human life. CO11: Jaswinder Singh's work 'Khuh-Khate' presents urban man's problems CO12: Balvinder Grewal's works Moh-Pas' theme is revenge in society and the thoughts, plots, and activities of people trapped in selfishness.

History and Culture of Punjab

Students, after completing this course, will be able to:

CO1: describe about Colonial Rule in Punjab i.e.

Annexation of Punjab Board of Administration

CO2: state about the western education introduced by Britishers.

CO3: explain about Agriculture development.

CO4: describe about early socio-religious reform in all

		religions.
		CO5: describe about Socio-Religious Reform Movement
		i.e. Arya Samaj, Singh Sabhas and Ahmadiyas.
		CO6: state about Development of Press and Literature.
		CO7: describe about the emergence of political
		consciousness.
		CO8: describe about the Gurdwara Reform movement i.e
		Major marchas, Activities of Babbar Akalis.
		CO9: explain about the freedom struggle i.e. all
		Monuments.
		CO10: explain about the partition of Punjab and its
		aftermath.
393	Environmental and	After the course, the students will be able to:
	Road Safety Education	CO1: describe about plant and animal distribution
		patterns in relation to biotic and biotic factors.
		CO2: explain about essential characteristics underlying
		Natural ecosystems.
		CO3: describe about the model population and
		community-level dynamics.
		CO4: interpret and present ecological results.
		CO5: identify Global environmental problems.
		CO6: explain about Social issues and Environment
		issue.
		CO7: describe the significance of road safety.
		CO8: state about Police-Public relationship, Traffic
		rule and Traffic signs.
		CO9: describe about Protective provisions against
		domestic and sexual violence.
		CO10: explain about the Protective laws for women.
		CO11: explain about the problem of drugs abuse.
		CO12: describe about the drugs and its effects.
		CO13: describe about the prevention and management
		of drug abuse.
	Physics	
0147	(Mechanics-II)	After the course, the students will be able to:

equations. CO2: describe about Inertial and Non-Inertial Frames. CO3: explain about Centrifugal and Coriolis force due to rotation of earth. CO4: explain the understand postulates of special theory of Relativity and Lorentz transformation equations. CO5: explain about the variation of mass with velocity and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field. CO4: describe the Biot Savart's law and its applications.			CO1: explain about the Rigid Body Motion and Euler's
CO3: explain about Centrifugal and Coriolis force due to rotation of earth. CO4: explain the understand postulates of special theory of Relativity and Lorentz transformation equations. CO5: explain about the variation of mass with velocity and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			
rotation of earth. CO4: explain the understand postulates of special theory of Relativity and Lorentz transformation equations. CO5: explain about the variation of mass with velocity and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO6: use the Maxwell's equations of Coharge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO2: describe about Inertial and Non-Inertial Frames.
CO4: explain the understand postulates of special theory of Relativity and Lorentz transformation equations. CO5: explain about the variation of mass with velocity and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO3: explain about Centrifugal and Coriolis force due to
of Relativity and Lorentz transformation equations. CO5: explain about the variation of mass with velocity and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			rotation of earth.
CO5: explain about the variation of mass with velocity and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO4: explain the understand postulates of special theory
and relativistic energy and momentum. CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			of Relativity and Lorentz transformation equations.
CO6: explain about the concept of Minkowski space and four vector formulation. CO1: describe about the types of waves and the wave equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO5: explain about the variation of mass with velocity
four vector formulation. (Vibrations, Waves and EM Theory-II) (CO1: describe about the types of waves and the wave equation with its solution. (CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. (CO3: explain about the reflection and transmission coefficients of amplitude and energy. (CO4: build a mathematical background for the Maxwell's equations and their significance. (CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. (CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. (CO1: explain about the microscopic form of Ohm's law and its failure. (CO2: explain about invariance of charge and derive the transformation equations of electric field. (CO3: describe the behaviour of various substances in magnetic field.			and relativistic energy and momentum.
(Vibrations, Waves and EM Theory-II) (CO1: describe about the types of waves and the wave equation with its solution. (CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. (CO3: explain about the reflection and transmission coefficients of amplitude and energy. (CO4: build a mathematical background for the Maxwell's equations and their significance. (CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. (CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. (CO1: explain about the microscopic form of Ohm's law and its failure. (CO2: explain about invariance of charge and derive the transformation equations of electric field. (CO3: describe the behaviour of various substances in magnetic field.			CO6: explain about the concept of Minkowski space and
equation with its solution. CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			four vector formulation.
CO2: explain about Impedance of a string and to study the matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.	0148	(Vibrations, Waves	CO1: describe about the types of waves and the wave
matching of Impedances and its uses. CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.		and EM Theory-II)	equation with its solution.
CO3: explain about the reflection and transmission coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO2: explain about Impedance of a string and to study the
coefficients of amplitude and energy. CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			matching of Impedances and its uses.
CO4: build a mathematical background for the Maxwell's equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO3: explain about the reflection and transmission
equations and their significance. CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			coefficients of amplitude and energy.
CO5: explain about the electromagnetic waves and study the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO4: build a mathematical background for the Maxwell's
the Impedance of a medium to the EM waves. CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			equations and their significance.
CO6: use the Maxwell's equations in deriving various expression for normal and oblique incidence. (Electricity and Magnetism-II) CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO5: explain about the electromagnetic waves and study
(Electricity and Magnetism-II) (Electricity and Magnetism-II) (CO1: explain about the microscopic form of Ohm's law and its failure. (CO2: explain about invariance of charge and derive the transformation equations of electric field. (CO3: describe the behaviour of various substances in magnetic field.			the Impedance of a medium to the EM waves.
(Electricity and Magnetism-II) CO1: explain about the microscopic form of Ohm's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			CO6: use the Maxwell's equations in deriving various
Magnetism-II) Magnetism-II) CO1. explain about the interoscopic form of Ohin's law and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.			expression for normal and oblique incidence.
and its failure. CO2: explain about invariance of charge and derive the transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.	0149	1	CO1: explain about the microscopic form of Ohm's law
transformation equations of electric field. CO3: describe the behaviour of various substances in magnetic field.		wagneusiii-ii)	and its failure.
CO3: describe the behaviour of various substances in magnetic field.			CO2: explain about invariance of charge and derive the
magnetic field.			transformation equations of electric field.
			CO3: describe the behaviour of various substances in
CO4: describe the Biot Savart's law and its applications.			magnetic field.
			CO4: describe the Biot Savart's law and its applications.
CO5: find the divergence and curl of magnetic field and			CO5: find the divergence and curl of magnetic field and
study vector potential.			study vector potential.
CO6: familiarize with Faraday's laws of EM induction			CO6: familiarize with Faraday's laws of EM induction
and understand self inductance and mutual			and understand self inductance and mutual

		inductance.
	Chemistry	
0151	(Inorganic Chemistry-	Students will be able to:
	B)	CO1: describe different Ionic structures such as NaCl,
		Zinc blende, Wurtzite, CaF2 and antiflourite and
		use their properties to corelate other inorganic
		molecules.
		CO2: distinguish ionic and covalent bond using Fajan's
		rule.
		CO3: express the diagonal relationship between alkali and
		alkaline earth metals.
		CO4: explain the chemistry of hydrides of boron-diborane
		and higher boranes, borazine, borohydrides,
		fullerenes, carbides, fluorocarbons.
		CO5: discuss the comparative study of groups 15-17
		elements along with properties and preparation of
		halogens, interhalogens and polyhalides.
0152	(Organic Chemistry-	Students will be able to:
0.00	B)	CO1: explain the nomenclature, methods of formation,
		physical and chemical properties of alkenes and
		cycloalkenes (with mechanism of selected
		reactions).
		CO2: explain Saytzeff's Rule, Hofmann elimination,
		Markownikoff's and anti- Markownikoff's rule.
		CO3: recognize the nomenclature, methods of formation,
		physical and chemical properties of Dienes and
		Alkynes (with mechanism of selected reactions).
		CO4: discuss the concepts Arenes and Aromaticity.
		CO5: explain in detail about Aromatic electrophilic
		substitution reactions.
		CO6: memorize the nomenclature, methods of formation,
		physical and chemical properties of Alkyl and Aryl
		Halides (with mechanism of selected reactions).
0153	(Physical Chemistry-	

	B)	Students will be able to:
		CO1: recognize Fundamental concepts of
		Thermodynamics.
		CO2: explain the First Law of Thermodynamics and
		related concepts like Heat capacity, Joule's Law-
		Joule-Thomson coefficient, and inversion
		temperature, Calculations of w, q, dU & dH for the
		expansion of ideal gases.
		CO3: memorize all concepts of Thermochemistry.
		CO4: recognize definition, classification, preparation and
		all properties of colloids.
		CO5: explain chemistry of solutions, dilute Solutions and
		colligative properties.
		Students will be able to:
	(Laboratory	CO1: explain the essential laboratory skills required for
	Practicals)	organic synthesis by performing synthesis of
		important organic compounds.
		CO2: describe different purification techniques in organic
		chemistry like recrystallization and distillation.
		CO3: prepare the solution of the desired concentration and
		the desired volume.
		CO4: determine Refractive indices, Viscosity and Surface
		Tension of samples.
		CO5: define waste management of the laboratory.
	Mathematics	
MAT-0145	(Solid Geometry)	After completing the course, students will be able
		to:
		CO1: describe the concept of transformation of
		axes in three dimensions.
		CO2: analyze Sphere and its properties, power of
		point with respect to Sphere, coaxial family of
		spheres, limiting points.
		CO3: differentiate Cylinder, Ellipse, Parabola,
		Hyperbolic Cylinder and Enveloping cylinder and

		their various properties.
		CO4: describe Cone, homogeneous equation of
		Second degree in three variables, Right Circular
		and Enveloping cones.
		CO5: solve problems regarding Paraboloids, plane
		sections of conicoids, generating lines and
		reduction of second degree equations.
MAT-0146	(Calculus-II)	After completing the course, students will be able
		to:
		CO1: demonstrate concepts of Concavity, Convexity,
		Points of Inflexion and Asymptotes.
		CO2: analyze Curvature and Radius of Curvature in
		Polar and Cartesian coordinates.
		CO3: solve problems regarding the concept of Evolute,
		Involute and Chord of Curvature.
		CO4: analyze and find Integral of Hyperbolic and
		Inverse Hyperbolic Functions.
		CO5: find out the integration of functions using
		Trapezoidal, Simpson and Prismoidal rules.
		CO6: differentiate the concepts of Summation of
		Series, Quadrature, Rectification, Volumes and
		Surfaces of Solids of Revolution.
MAT-0147	(Theory of Equations)	After completing the course, students will be able
		to:
		CO1: apply Euclid Algorithm, synthetic division.
		CO2: describe the relationship between Roots and
		Coefficients of Equations using Virge Vieta method.
		CO3: describe the concept of Transformation of
		Matrices, calculate number of Real and Complex
		roots using Descarte's rule of signs.
		CO4: find the Solutions of Cubic equations by using
		Cardon Method and Biquadratic equations by
		using Descarte and Ferrari method.
	I	151

	Computer Science	
CS03	(Operating System	The students after completing this course, will be able to:
	Concepts)	CO1: explain how Operating System is important for
		Computer System.
		CO2: describe the different types of Operating System
		and their services.
		CO3: explain the process management, concurrent
		processes and threads.
		CO4: handle deadlock and work on it.
		CO5: describe about Memory Management: Logical and
		Physical memory, Segmentation, various
		paging algorithms.
CS04	(C Programming)	The students after completing this course, will be able to:
		CO1: explain the basic terminology used in computer
		Programming.
		CO2: write, compile and debug programs in C language
		CO3: use different data types in a computer program
		CO4: design programs involving decision structures,
		loops, arrays and strings.
		CO5: describe about the various types of Functions and
		String handling mechanisms.
		CO6: explain the difference between call by value and
		call by reference.
PCS02	(Practical Based on	The students after completing this course, will be able to:
1 C302	Paper CS04)	CO1: read, understand and trace the execution of
		programs written in C language.
		CO2: implement programs using operators, data types,
		Decision, Loop, Case Control Statements.
		CO3: design programs involving arrays, strings,
		pointers, functions and implement the dynamics
		of memory by the use of pointers
	Agriculture	
0115	(Agricultural Economics and	After the course, the students will be able to:

	Agronomy)	CO1: explain about agricultural banking, agricultural
		loans – Its various types, repayment mode, form
		filling for agricultural loans.
		CO2: explain about National policy for agricultural
		loans.
		CO3: state about the agriculture credit cards.
		CO4: state the fundamentals of land measurements and
		land revenue.
		CO5: explain about various legal aspects of import and
		export of raw crop and crop products.
		CO6: explain about quarantine laws.
		CO7: describe the fundamentals of agricultural
		Economics, Psychological pressure on farmer
		and villagers of different classes.
		CO8: get skilled in the methods of storage of
		vegetables, fruits, grains at local and large level.
		Vegetable and fruit preservation.
		CO9: read about soil types, management, improvement
		and amendments.
		CO10: explain about the soil testing. Fundamental of
		fertilizers and manures, Important fertilizers
		and their uses and Nitrogen fixation.
		SEMESTER-III
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
0202	English	After the course, the students will be able to:
		CO1: explain the different aspects and forms of modern
		communication.
		CO2: get skilled in listening, speaking, reading and
		writing.
		CO3: improve their vocabulary.
		CO4: build their confidence for participation in placement
		drives.
		CO5: show better performance in English language testing
		examinations like TOEFL, IELTS

	Physics	
0247	(Statistical Physics and Thermodynamics-I)	After the course, the students will be able to: CO1: describe the basic ideas of statistical physics and probability. CO2: explain the distribution of various particles in various compartments of equal size.
		CO3: describe about deviation from the state of maximum probability and distribution of n particles in k compartments of unequal size. CO4: explain the three kinds of statistics: MB, BE & FD
		and their distribution laws. CO5: explain the Planck's Law, Wein's displacement law, Stefan's law and the concept of Fermi Energy.
		CO6: explain the concept of most probable, average and rms speeds of molecules and their mathematical expression.
0248	(Optics and Laser-I)	CO1: explain about Optics and a knowledge of the interference of light.
		CO2: explain about the interference fringes by studying interference by wavefront and amplitude division. CO3: explain about Michelson's & Fabry-Perot
		interferometer with their applications.
		CO4: describe about Diffraction and the types of Diffraction alongwith its use for rectagular and circular apertures.
		CO5: explain the resolving power of optical instruments and their mathematical expression.
		CO6: explain about polarization of light and study about polarised, elliptically and circularly polarised light.
0249	(Quantum Physics-I)	CO1: explain the fundamental postulates of quantum mechanics.
		CO2: explain Planck's formula of black body radiation. CO3: describe the wave function and Schrodinger's equation.

		CO4: solve and understand the problems in one and three
		dimensions.
		CO5: explain the Quantum theory of hydrogen atom in
		detail along with its energy levels and eigen
		functions.
		CO6: explain the various quantum numbers and their
		applications.
	Chemistry	
		After the course, the students can:
0250	(Inorganic Chemistry-	CO1: explain the chemistry and geometry of elements of
	A)	first transition series
		CO2: explain the details of chemistry of elements of
		second and third transition series along with their
		magnetic behaviour, spectral properties and
		stereochemistry.
		CO3: describe all concepts, properties and uses of co-
		ordination compounds.
		CO4: express details of Werner's coordination theory and
		Valence bond theory.
		Students will be able to:
0251	Organic Chemistry-A	CO1: memorize the nomenclature, methods of formation,
		physical and chemical properties of Alcohols and
		Phenols.
		CO2: describe mechanisms of Fries rearrangement,
		Claisen rearrangement, Gatterman synthesis and
		Reimer-Tiemann reaction.
		CO3: explain the nomenclature, methods of formation,
		physical and chemical properties of Aldehydes and
		Ketones.
		CO4: describe mechanisms of benzoin, aldol, Perkin,
		Knoevenagel condensations, Wittig and Mannich
		reaction.
		CO5: explain in detail about use of acetals as protecting
		group, Oxidation of aldehydes, Baeyer-Villiger
		155

		oxidation of ketones, Cannizzaro reaction, MPV,
		Clemmensen, Wolff-Kishner, LiAIH4 and NaBH4
		reductions.
		CO6: discuss the nomenclature, methods of formation,
		physical and chemical properties of Carboxylic
		acids.
	Physical Chemistry-A	
0252		Students will be able to:
		CO1: explain about qualitative description of
		Intermolecular forces, structure of liquids.
		CO2: discuss the chemistry of Liquid Crystals in detail.
		CO3: recognize the concepts of chemical equilibrium in
		terms of equilibrium constant, various laws and
		concepts involved, reaction isotherm and Clausius-
		Claperyron equation.
		CO4: memorize Reaction isotherm and Reaction isochore-
		Clapeyron equation, law of mass of mass action and
		Le -Chatelier's principle.
		CO5: explain all concepts of second and third Law of
		Thermodynamics
	(Laboratory	
	Practicals)	Students will be able to:
		CO1: determine Estimation of calcium content, hardness
		of water, ferrous and ferric and copper using
		volumetric analysis.
		CO2: analyse Cu as CuSCN and Ni as Ni
		(dimethylgyoxime) using Gravimetric Analysis.
		CO3: determine the solubility of benzoic acid at different
		temperatures and to determine ΔH of the
		dissolution process.
		CO4: determine the enthalpy of neutralization of a weak
		acid/weak base versus strong base/strong acid.
		CO5: explain the enthalpy of ionization of the weak
		acid/weak base.
		CO6: find pH of a Buffer solution and determination of
		ionization constant of a weak acid.
<u> </u>	1	1

	Mathematics	
MAT-0241	(Advanced Calculus-I)	After completing the course, students will be able
		to:
		CO1: solve problems of Limit and Continuity of
		functions of Two or More Variables.
		CO2: describe the concept of Partial differentiation,
		derivability of real valued functions of two or
		three variables.
		CO3: differentiate Schwarz and Young's theorem and
		their applicability, statements of Inverse and
		Implicit function theorems and applications.
		CO4: practice the concept of differentiation, gradient,
		curl, divergence and its applications.
		CO5: apply Euler theorem, Taylor theorem, Jacobians,
		Envelopes and Evolutes.
		CO6: solve problems of Maximum, Minimum and
		saddle point of functions of two and three
		variables and Lagrange's method to solve
		questions related to this topic
	(Differential	
MAT-0242	Equations I)	After completing the course, Student will be able to:
		CO1: differentiate and find solutions of first and
		higher order differential equations.
		CO2: examine the techniques for obtaining solutions to
		ordinary differential equations.
		CO3: investigate the qualitative and quantitative
		behavior of solutions of system of differential
		equations.
		CO4: analyze the concept of simultaneous differential
		equations and orthogonality.
		CO5: calculate by using methods of solving differential
		equations using variation of parameters,
		reduction of order.
		CO6: apply the concept of solving and number of
		problems related to natural phenomenon,

		engineering and many other situations.
		CO7: describe the concept of Charpit general method
		of solutions.
	(Statics)	
MAT-0243		After completing the course, students will be able
		to:
		CO1: describe and apply the concept of composition
		and resolution of Concurrent Forces,
		Parallelogram and Triangle law of forces, Lami's
		theorem, Components of Forces and its
		applications in daily life.
		CO2: analyze the concepts of equilibrium conditions
		for coplanar concurrent forces, smooth inclined
		planes.
		CO3: explain the concept of Parallel forces and its
		types (parallel like and unlike forces) and
		resultant of these forces.
		CO4: solve problems related to Moment, Couple of
		forces, reduction of coplanar forces to Single
		force and Couple.
		CO5: describe Friction, Laws of Friction, problems
		related to Ladders, Rods, Spheres and Circle.
	Computer Science	
CS05	(Computer	The students after completing this course, will be able
	Organisation)	to:
		CO1: explain the structure, function and characteristics of computer systems.
		CO2: identify, understand and apply different number systems and codes.
		CO3: describe the basic building block concepts in combinatorial logic design, sequential building block, Microinstructions.
		CO4: state the concept of Microinstructions,
		Microprocessor and assembly language in detail.
CS06	(Object Oriented Programming Using	The students after completing this course, will be able

	C++)	to:
		CO1: differentiate between object oriented
		programming and procedural oriented language
		and data types in C++.
		CO2: C++ features such as composition of objects,
		constructor, destructor, Operator overloading,
		inheritance, Polymorphism etc.
		CO3: Students will understand the concept of Virtual
		and pure virtual functions.
	(Practical Based on	The students after completing this course, will be able
PCS03	Paper CS06)	to:
		CO1: make programs on the concept of Classes and
		objects, access specifiers.
		CO2: do programming on declaring member function
		inside and outside class, static and friend
		functions.
		CO3: design programs on Constructor and destructor,
		Inheritance with its types, Private, public
		protected, Concept of polymorphism, operator
		overloading, method overloading etc.
	Agriculture	
0216	(Agricultural Diversification and	After the completion of the course, the students will be able to:
	Machinery)	CO1: aid on works such as dairy, poultry, fishery,
		mushroom cultivation, animal husbandry, bee
		keeping.
		CO2: maintain grassy lawns and flower beds.
		CO3: raise winter and summer ornamental flowers
		(rose, gladioli, dahlias, dianthus, and foliage
		plants).
		CO4: get skills of landscape of an educational
		institute, factory, panchayat lands and office
		buildings.
		CO5: describe about medicinal, aromatic and spice
		plants.
		CO6: grow non-conventional plants.
<u> </u>		150

CO7: explain about Gentically Modified crops. CO8: describe the fundamentals of land measurem and land revenue. CO9: describe about the important parts of the traccombine, thresher and their maintenance.	ents
and land revenue. CO9: describe about the important parts of the trace.	CITES
combine, thresher and their maintenance.	ctor,
CO10: explain about various agricultural tools and	
implements.	
SEMESTER-IV	
0302 English After the course, the students will be able to:	
CO1: use English as a language in its various textu	ıal
forms and to become thoughtful, imaginative	and
effective communicators in a changing socie	ty.
CO2: write an effective business document (notice	·,
advertisement, etc.)	
CO3: enhance their writing skills.	
CO4: explain various literary aspects through the t	ext
which capacitates them to enrich their literar	ry and
cultural values.	
CO5: make English learning a pleasurable endeave	or.
CO6: show better performance in International En	glish
language testing examinations like TOEFL,	ELTS.
Physics	
0347 (Statistical Physics After the course the students, will be able to:	
and Thermodynamics- II) CO1: explain the entropy and its use in the three la	iws of
Thermodynamics.	
CO2: explain the PV and ST diagrams graphically	and
mathematically.	
CO3: explain the entropy for a perfect gas and hea	t death
of the universe.	
CO4: derive Maxwell's Thermodynamical relation	s and
their applications.	
CO5: explain the Clausius Clapeyron equation and	Joule
Thomson effect.	
CO6: explain the mathematical expressions for Th	ermo
emf, Peltier and Thomson coefficients for a	

		Thermocouple as a reversible heat engine.
0348	(Optics and Lasers-II)	 CO1: explain the lasers fundamentals and Einstein's coefficients. CO2: explain the Natural, Collision and Doppler Broadening of spectral lines theoretically and mathematically. CO3: explain the various lasers schemes and types of lasers with applications. CO4: familiarize to fiber optics and various losses in optical fibre. CO5: explain about Optical fibre-based communication system and the medical applications of laser and fiber optics.
0349	(Quantum Physics-II)	fiber optics. CO1: explain about the specimen of Hydrogen atom in detail. CO2: explain the Zeeman effect, Stark effect and Auger effect. CO3: explain the symmetric and antisymmetric wave functions and the concept of L-S and J-J coupling. CO4: explain about the rotational vibrational levels and spectrum of diatomic molecules. CO5: describe the Franck Condon principle. CO6: state the Raman effect and familiarize with magnetic resonance experiments.
0350	Chemistry (Inorganic Chemistry-B)	Students will be able to: CO1: explain about lanthanide contraction, complex formation, occurrence and isolation of lanthanide compounds. CO2: explain about General features and chemistry of actinides, chemistry of separation of Np, Pu and Am from U, similarities between the later actinides

		and the later lanthanides.
		CO3: define Arrhenius, Bronsted-Lowry and Lewis
		concepts of acids and bases along with Lux-Flood
		and solvent system.
		CO4: explain detailed chemistry of Oxidation and
		Reduction.
		CO5: explain about physical properties, types and general
		characteristics of solvents, reactions in non-aqueous
		solvents with reference to liquid NH3 and liquid
		SO2.
	(Organic Chemistry-	
0351	B)	Students will be able to:
		CO1: express Structure, nomenclature, preparation,
		Physical and chemical properties of carboxylic acid
		derivatives.
		CO2: explain about interconversion of acid derivatives by
		nucleophilic acyl substitution and mechanisms of
		esterification and hydrolysis (acidic and basic).
		CO3: explain the chemistry of ethers, epoxides, fats, oils
		and detergents.
		CO4: describe the nomenclature, methods of formation,
		physical and chemical properties of organic
		compounds of Nitrogen.
		CO5: recognize mechanisms of Gabriel-phthalimide
		reaction, Hofmann bromamide reaction.
		CO6: explain about heterocyclic compounds such as
		pyrrole, furan, thiophene, pyridine, indole,
		quinoline, isoquinoline their methods of synthesis
		and reactions.
	(Physical Chemistry-	
0352	B)	CO1: explain the Phase equilibrium concept of one and
		two component systems.
		CO2: explain about thermodynamic derivation and
		applications of Nernst distribution law.
		CO3: describe the various terms involved in phase
		diagram and Gibb's phase rule.
	I	162

		CO4: explain the details of electrochemistry.
		CO5: mention and explain various methods for the
		determination of transport number.
		CO6: explain the concepts of electrolytic conduction and
		dilution.
	(Laboratory	Students will be able to:
	Practicals)	CO1: determine of Rf values and identification of organic
		compounds.
		CO2: separate isometric mixture of Ortho and
		para nitroaniline using hexane and ethyl acetate (8.5
		: 1.5) by thin layer chromatography.
		CO3: perform extraction of caffeine from tea leaves.
		CO4: recognize detection of elements (N, S and halogens)
		and functional groups (phenolic, carboxylic,
		carbonyl, esters, carbohydrates, amines, amides,
		nitro and anilide), in simple organic compounds.
	Mathematics	
MAT-0341	(Advanced Calculus-	After completing the course, students will be able to:
	II)	CO1: explain the concept of Sequences, bounded
		sequences, Convergence and Divergence and
		Oscillation of sequences,
		CO2: analyse the theorems related to Sequences,
		Monotonic Sequences, and Cauchy's
		Convergence of sequences.
		CO3: explain the Sequential continuity and Uniform
		continuity of Functions of Single Variable.
		CO4: use Series and tests to check the convergence and
		non-convergence of series like comparison test.
		CO5: perform many tests like Cauchy's Integral test,
		Cauchy's Root test, Ratio test, D'Alembert test
		etc. and their difference from one another to
		solve various problems.
		CO6: rearrange absolute Convergent series and
		Riemann's Rearrangement Theorem.
		163

	(Differential	
MAT-0342	Equations II)	After completing the course, students will be able to:
		CO1: solve questions of basic concepts of Power Series
		methods, Bessel and Legendre functions.
		CO2: describe about partial differential equations of
		first order, Integral Surfaces and Orthogonality
		of System of Surfaces.
		CO3: describe the concepts of Laplace transforms,
		Inverse Laplace transforms and its applications.
		CO4: verify the existence theorem for Laplace
		transformations and its applications.
	(Dynamics)	
MAT-0343		After completing the course, students will be able to:
		CO1: describe and analyze Motion of particle with
		constant acceleration, acceleration of Falling
		bodies and its practical applications.
		CO2: analyze Motion of two particles connected with a
		string, motion along smooth inclined plane,
		Constrained Motion along plane.
		CO3: verify motion under gravity and motion of any
		particle in vertically upward direction.
		CO4: describe the concept of Simple Harmonic Motion
		and Elastic String.
		CO5: apply Curvilinear motion of a particle and will
		able to solve day to day problems.
		CO6: apply the concepts of Work, Power, Potential
		Energy and the effect of gravitation on these
		Forces.
		CO7: describe and solve problems regarding The
		concept of Relative Motion and various topics
		related to this concept like velocity and
		acceleration.
		CO8: describe the various types of momentum like
		Angular and Impulsive.
	Computer Science	

CS07	(Data Base Concepts)	The students after completing this course, will be able
		to:
		CO1: discuss Database management systems, databases
		and its applications.
		CO2: state about the good formal foundation on the
		relational model.
		CO3: explain about relational algebra and calculus.
		CO4: normalize the database & understand the internal
		data structure.
CS08	(Data Structures)	Students after completing this course, will be able to:
		CO1: apply the basic concepts of data structures and
		algorithms.
		CO2: describe the concepts about searching and sorting techniques.
		CO3: apply the basic concepts about stacks, queues,
		lists, trees and graphs
		CO4: write the algorithms and follow step by step
		approach in solving problems with the help of
		fundamental data structures
PCS04	(Practical Based Paper	The students after completing this course, will be able
1 0501	CS08)	to:
		CO1: state how data can be stored in memory.
		CO2: implement Arrays and various operations on
		array.
		CO3: implement Stacks and Queues and various
		operations on them.
		CO4: implement the concept of Linked List.
		CO5: implement the concept of various types of Trees.
		CO6: implement various searching and sorting
		techniques along with their Complexity.
		CO7: implement Graph and Graph traversal
		techniques.
	Agriculture	
0316	C	A from the communities of the course the students will be
i	(Cultivation Practices of Vegetables, Timber	After the completion of the course, the students will be able to:

	and basic Statistical Methods)	CO1: describe about the tillage, fundamentals and principles of tillage, zero tillage, and tillage implements. CO2: describe about the cultivation practices of potato, tomato, bhindi, cabbage, onion and asparagus. CO3: explain about timbers and lumbers. CO4: raise Dalbergia, Tectona, Poplar and Eucalyptus trees. CO5: apply statistical methods for agricultural work including mean, mode, median, chi-square, standard deviation.
		SEMESTER-V
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
0448	Physics (Condensed Matter Physics-I)	After the course, the students will be able to: CO1: explain about Crystal Structure and Symmetry Operations. CO2: describe the concept of Reciprocal Lattice and able to use it as a tool. CO3: explain about Crystal Diffraction and understand diamond and sodium chloride structures. CO4: describe about the fundamental principles of Fermi levels and Band gap in semi-conductors. CO5: explain about Instrinsic and Extrinsic semi- conductors. CO6: explain about Hall effect in metals and its applications.
0449	(Electronics and Solid- State Devices-I)	CO1: explain the concept of semi-conductor devices, biasing techniques, rectifiers and characteristics of different types of photo conductive devices. CO2: Analysis of efficiency and ripple factor in filter circuits and different configuration of a transistor. CO3: explain about CRO in detail along with its

		applications.
		CO4: explain about the various amplifiers using H parameters.
		CO5: describe various junction diodes and their uses.
0450	(Nuclear and Particle Physics-I)	 CO1: explain the general properties of Nuclei, formation of Nuclei and their binding energy. CO2: explain about the Liquid drop model and Shell model along with their applications and limitations. CO3: explain Radioactivity, α, β and γ decoy. CO4: explain about a nuclear reaction and its types, conservation laws and kinematics of Q-value equation. CO5: explain about Rutherford scattering cross section and distance of closest approach. CO6: analyse the energy released during nuclear fission and fusion.
	Chemistry	Students will be able to:
0451	(Inorganic Chemistry-A)	CO1: explain about limitations of Valence Bond Theory, crystal field splitting in octahedral, tetrahedral and square planar complexes, factors affecting the crystal – field parameters and their Spectro chemical Series. CO2: explain thermodynamic and Kinetic stability of metal complexes, factors affecting the stability and substitution reactions of square planar complexes. CO3: describe nomenclature and classification of organometallic compounds. CO4: explain preparation, properties, bonding and applications of alkyls and aryls of Li, Al, Hg, Sn and Ti. CO5: explain about metal – ethylenic complexes and homogeneous hydrogenation, mononuclear carbonyls and the nature of bonding in metal carbonyls.

		CO6: describe the details of Bioinorganic Chemistry.
	(Organic Chemistry-	
0452	A)	Students will be able to:
		CO1: explain principles, types of electronic transitions,
		effect of conjugation, concept of chromophore,
		auxochrome, different shifts and UV spectra of
		conjugated enes and enones.
		CO2: explain Woodward Fisher Rules and their
		applications in calculating maximum values of
		conjugated alkenes and conjugated carbonyl
		compounds.
		CO3: explain about Molecular vibrations, Hooke's law,
		selection rules, intensity and position of IR bands,
		measurement of IR spectrum, fingerprint region,
		characteristic absorptions of various functional
		groups.
		CO4: memorize the interpretation of IR spectra of simple
		organic compounds and structure elucidation of
		simple organic compounds using UV, IR and PMR
		spectroscopic techniques.
		CO5: explain basics of 1H NMR spectroscopy,
		interpretation of PMR spectra of simple organic
		molecules such as ethyl bromide, ethanol,
		acetaldehyde, 1,1,2-tribromoethane, ethyl acetate,
		toluene and acetophenone.
		CO6: discuss the nomenclature, classification, methods of
		formation, physical and chemical properties of
		Carbohydrates.
	(Physical Chemistry-A)	
0453	/1)	CO1: recognize the significance of quantum mechanics
		and quantization of energy.
		CO2: define Black-body radiations, Planck's radiation
		law, photoelectric effect, heat capacity of solids,
		Compton effect, Bohr's model of hydrogen atom
		and its defects.
		CO3: derive Schrodinger wave equations for particle in a

		box and H-atom and apply the concept of
		quantization of energy to different orbitals and
		calculate the energy levels.
		CO4: explain quantum numbers and derive radial wave
		functions and angular wave functions.
		CO5: describe details of Molecular orbital theory, valence
		bond model and comparison between both.
		CO6: differentiate between thermal and photochemical
		processes, application of Grothus-Drapper and
		Stark-Einstein laws of photochemistry to calculate
		quantum yield.
		CO7: use Jablonski diagram to depict fluorescence and
		non- radiative processes (internal conversion,
		intersystem crossing).
		CO8: explain photosensitized reactions and
		Photochemistry of carbonyl compounds and alkenes
	(Laboratory	
	Practicals)	Students will be able to:
		CO1: explain preparation of sodium trioxalatoferrate (III),
		Na3[Fe(C2O4)3] and determination of its
		composition by permaganometry.
		CO2: prepare Copper tetraammine complex
		[Cu(NH3)4]SO4.
		CO3: prepare cis-and trans-bisoxalatodiaqua chromate
		(III) ion.
		CO4: memorize Separation and estimation of Mg(II) and
		Fe(II).
		CO5: determine strength, solubility, saponification and
		ionization constant of samples conductometrically.
		CO6: explain the distribution of iodine between water and
		CC14.
		CO7: explain about the distribution of benzoic acid
		between benzene and water.
		CO8: determine molecular weight of a non – volatile
		solute by Rast method.
		CO9: determine apparent degree of dissociation of an
<u> </u>	1	160

		electrolyte (e.g. NaCl) in aqueous solution of the
		substance.
	Mathematics	
MAT-0443	(Analysis-I)	After completing the course, students will be able to:
		CO1: describe Countable and Uncountable sets and
		problems related to this topic
		CO2: explain Riemann Integral and Integrality of
		Continuous, Monotonic functions and their
		Applications.
		CO3: explain Theorems like Fundamental theorem
		of Integral Calculus, Mean Value Theorem of
		Integral Calculus and their applications by
		solving various problems.
		CO4: use Beta Gamma Functions, Improper Integrals,
		Comparison Tests to solve Improper Integral.
		CO5: perform Abel's test, Dirichlet's test to solve
		Improper integral, Frullani Integral
		CO6: explain about Continuity and Derivability of an
		Integral of a Function as a Parameter.
MAT-0444	(Modern Algebra)	After completing the course, students will be able to:
		CO1: differentiate and solve theorems of Groups,
		Subgroups, Lagrange's Theorem, Normal
		subgroups Quotient Groups.
		CO2: describe Homeomorphisms, Isomorphism
		theorems and problems related to this concept.
		CO3: analyze Conjugate elements, Class Equations,
		Permutation Groups, and Alternating Groups etc.
		CO4: describe and solve problems of Rings, Subrings,
		Ideals and Integral Domain and problems and
		theorems based on these concepts.
		CO5: differentiate Quotient Rings, Prime and Maximal
		ideals, Homomorphism and Isomorphism based
		on Rings.
MAT-0445	(Probability Theory)	After completing the course, students will be able to:

		CO1: describe Probability, Conditional Probability by
		solving practical problems related to this
		concept.
		CO2: solve Random Variables and topics on this fields
		like probability density function, discrete and
		continuous random variables, Moment
		Generating Functions, Skewness and Kurtosis.
		CO3: differentiate Discrete Distributions-Bernoulli,
		Binomial, Negative Binomial, Geometric and
		Poisson Distributions and problems related to
		these concepts.
		CO4: apply Continuous Distributions-Uniform,
		Exponential, Beta, Gamma, Chi-Square and
		Normal distributions on various problems.
		CO5: describe and analyze Bivariate Random
		Variables and distribution along with the
		concepts of joint expectation, correlation
		coefficient, Bivariate Normal Distribution.
	Computer Science	
CS09	(Project Management)	The students after completing this course, will be able to:
		CO1: explain the concepts of Project Management for
		planning to execution of projects, Able to
		understand different phases of SDLC.
		CO2: use the feasibility analysis in Project
		Management and network analysis tools for cost
		and time estimation.
		CO3: describe about Project Directions, Coordination
		and Control, Project Management Performance,
		Report Writing.
CS10	(Relational Database	The students after completing this course, will be able
	Management System)	to:
		CO1: state the basic concepts and the applications of
		database systems.
		CO2: retrieve any type of information from a data base
		171

		by formulating complex queries in SQL.
		CO3: describe the relational database design principles
		CO4: explain about Data Constraints, Grouping of data,
		Indexes, Sequences, Pl/SQL Concepts.
	Practical C-Practical	
PCS05	Based on paper CS10)	The students after completing this course, will be able
		to:
		CO1: use the DDL commands, Primary key and
		Candidate keys.
		CO2: apply the various DML commands for retrieval of
		information
		CO3: perform all the Table join operations.
		CO4: develop simple applications using PL/SQL
		procedure, cursor, triggers.
	Agriculture	
0442	(Agrodiversity and Physiology)	After the completion of the course, the student will be able to:
		CO1: explain the history of agroforestry,
		agroecological zonification, socioeconomic
		aspects of agroforestry, agroforestry system for
		small holdings arid land agroforestry.
		CO2: describe about the establishment of orchard basic
		cultural practices, elemental role and needs of
		nutrients, propagation – principles and
		techniques, stock –scion relationship and their
		incompatibility, Fruit Physiology
		CO3: describe about the respiration- glycolysis, citric
		acid cycle, photorespiration, photosynthesis –
		light reaction, dark reaction, C4 –cycle, CAM
		plants growth hormones and their role in
		agriculture.
		CO4: describe about the enzymes and vitamins,
		vernalization and photoperiodism.
		CO5: explain about intellectual property right,
		informatics in agriculture, seed production and
		technology indigenous technical knowledge in

		agriculture introduction to crop biotechnology	
		agrobiodiversity.	
	SEMESTER-VI		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES	
	Physics		
0544	(Condensed Matter Physics-II)	After the course, the students can: CO1: explain about Lattice dynamics and magnetic classification of materials. CO2: explain about Langevin theory of Diamagnetism and Paramagnetism, Weiss theory of Ferromagnetism. CO3: explain about liquids crystals, their types, properties and applications. CO4: describe the knowledge of Superconductivity. CO5: explain the basic ideas of materials at Nano scale and Nano particles. CO6: describe the Carbon Nano Structures and the applications of Nanotechnology in various fields.	
0545	(Electronics and Solid State Devices-II)	CO1: describe the structure and working of JFET and MOSFET. CO2: describe the feedback in amplifiers and familarize with LC oscillators, Colpitts and Hartlery oscillators. CO3: explain the Analog and Digital circuits along with the various gates. CO4: explain Boolean Algebra and De-Morgan's theories. CO5: explain the analog and digital communication systems along with amplitude and frequency modulation. CO6: explain the sky wave, satellite and mobile communication.	
0546	(Nuclear and Particle	CO1: describe the interaction of nuclear radiation with	

	Physics-II)	matter and derive Bethe Bloch formula.
		CO2: explain about Gamma ray interaction with matter to
		study Photoelectric effect, Compton effect and Pair
		Production.
		CO3: explain the various nuclear detectors and their use in
		Nuclear Physics.
		CO4: explain the four basic interactions and the
		classification of Elementary particles, their
		properties and their decay modes
		CO5: describe the various quantum numbers and Gell
		Mann Nishijima formula.
		CO6: explain the Quark Model and its properties.
		CO7: explain the various particle accelerators and their
		use in Particle Physics.
	Chemistry	
0547	(Inorganic Chemistry-	Students will be able to:
	B)	CO1: define Silicones and phosphazenes as examples of
		inorganic polymers and nature of bonding in
		triphosphazenes.
		CO2: explain the chemistry of Hard and Soft Acids and
		Bases.
		CO3: explain different types of electronic transitions, L –
		S coupling, selection rules for d-d transitions,
		spectroscopic ground states, Orgel –energy level
		diagram for d1 and d9states, discussion of the
		electronic spectrum of [Ti(H2O)6]3+ complex ion.
		CO4: explain magnetic behaviour, methods of
		determining magnetic susceptibility, correlation of
		μs and μeff values, orbital contribution to magnetic
		moments and application of magnetic moment data
		for 3d-metal complexes.
0540	(Organic Chemistry-	Students will be able to:
0548	B)	CO1: discuss classification, structure, stereochemistry,
		preparation and reactions of amino acids.

		CO2: explain structure, nomenclature, classification,
		synthesis and reactions of peptides and proteins.
		CO3: explain the constituents of nucleic acids,
		Ribonucleosides and ribonucleotides, and double
		helical Structure of DNA.
		CO4: describe the chemistry of Synthetic Polymers in
		detail.
		CO5: explain organic Synthesis via Enolates.
		CO6: discuss the formation, structure and chemical
		reactions of Organomagnesium, Organozinc and
		Organolithium Compounds.
	(Physical Chemistry-	
0549	B)	CO1: describe X-ray diffraction, Bragg equation,
		determination of crystal structure of NaCl, KCl and
		CsCl and applications of Powder diffraction for
		structure determination.
		CO2: explain about Thermal and photochemical reaction
		in solid state.
		CO3: explain details of Electromagnetic radiation, regions
		of the spectrum, basic features of different
		spectrometers, Born-Oppenheimer approximation
		and degrees of freedom.
		CO4: give details of Rotational, Vibrational and
	(Laboratory	Electronic Spectrum.
	Practicals)	
		Students will be able to:
		CO1: explain Column Chromatography to Separate
		fluorescein and methylene blue, and leaf pigments
		from spinach leaves.
		CO2: prepare iodoform from ethanol and acetone.
		CO3: prepare nitro and Iodo derivatives of given samples.
		CO4: discuss halogenation of organic compounds using
		oxidation and reduction reactions.
		CO5: explain stereochemical study of Organic
		Compounds via Models.

	Mathematics	
MAT-541	(Analysis-II)	After finishing this course, students will be able to:
		CO1: perform double Integration over a Rectangle,
		bounded area, unbounded regions. Double
		integrals as Volumes, change to Polar
		Coordinates.
		CO2: analyse Triple integral in Rectangular
		Coordinates, Repeated integrals in 3-dimension.
		Change of Variables in a Triple Integral to
		Cylindrical and Spherical coordinates.
		CO3: do Integration of line, surface and find volume by
		using Gauss, Green and Stoke's theorems.
		CO4: apply Sequence and series of Functions and
		Various criteria to solve problems related to
		check the convergence and divergence of Series
		of functions. Taylor's and Able's theorem for
		Power Series.
		CO5: perform Fourier expansion of Monotonic, Even,
		Odd functions, Fourier series in the interval [a,b],
		$[0,2\pi].$
MAT-0542	(Linear Algebra)	After finishing this course, students will be able to:
WIA1-0342	(Linear Argeora)	CO1: describe Vector space, subspace, algebra of
		Subspace, Linear dependence and independence
		and theorems related to these concepts.
		CO2: analyze Basis and Dimension of a Vector space
		as well as subspace, Direct Sum and
		Complements.
		CO3: apply Linear Transformations, Rank Nullity
		theorem, Use of matrices with this topic, Change
		of Basis.
		CO4: solve Characteristic Roots and Characteristic
		Vectors, Cayley-Hamilton Theorem
		Diagonalizable Operators and Matrices, Minimal
		polynomial of a linear operator.
		polynomial of a finear operator.

MAT-0543	(Numerical Analysis)	This course will help students to:
		CO1: apply Bisection, Secant, Regula-Falsi and
		Newtons's Method to solve various types of
		equations and also to find roots of polynomial.
		CO2: solve Interpolation, Lagrange and Hermite
		method, Divided Difference method.
		CO3: solve Numerical Differentiation, Numerical
		quadrature with the help of Newton-Cote's,
		Gauss Quadrature and Chebychev's formula.
		CO4: apply methods to solve Linear Equations and
		ordinary differential Equations.
	Computer Science	
CS11	1	Students often completing this course will be able to
CS11	(E-Commerce)	Students after completing this course, will be able to:
		CO1: describe the basic business management
		concepts.
		CO2: state about e-commerce, both the technical and
		business aspects.
		CO3: explain the principles and practices of e-
		commerce and its related technologies.
		CO4: state the payment details and security issues.
CS12	(Web Programming)	Students after completing this course, will be able to:
		CO1: describe the fundamental concepts of Internet,
		Internet technologies.
		CO2: differentiate the features of different browsers.
		CO3: develop colorful web pages using tags, bullets
		and alignment on texts.
		CO4: explain the table handling tags, Frames and
		Frameset for designing web pages.
		CO5: explain java script – client-side objects, Event
		handling, built in objects.
		CO6: do programming with PHP.
		_
PCS06	(Practical based on Paper CS12)	Students after completing this course, will be able to:

		CO1: develop web pages using HTML, DHTML and
		Cascading Styles sheets.
		CO2: develop a dynamic web pages using JavaScript
		(client side programming).
		CO3: do programming in PHP.
	Agriculture	
0515	(Insects, Pests and Diseases of Crops)	After the completion of course, the students will be able to:
		CO1: protect plants and crops from diseases and
		describe about biological control, chemical
		control, systemic fungicides, Weedicides,
		Compatibility of various fungicides and
		Weedicides and Rodenticides
		CO2: explain about the diseases of crop plants such as
		wheat, rice, maize, citrus, grapes, cotton,
		vegetables, mustard and groundnut.
		CO3: explain about general account of Insects and
		pests, classification of insects, parts of insect
		body, and control measures of insect pests and
		diseases of crop.
		CO4: explain about the insect and nematode diseases of
		cereal (wheat, maize, rice) crops, oil (sunflower,
		groundnut, mustard) crops, fruit (mango, guava,
		citrus) crops and Vegetable crops.
		citrus) crops and Vegetable crops.

B.SC. (AGRICULTURE)

PROGRAM OUTCOMES (POs)	After this program, the students will be able to:
	PO1: accommodate insightful information of Agriculture
	principles necessary for the applications of
	Agriculture.
	PO2: describe recent trends in technology and solve
	problem in industry and farmers.
	PO3: apply practical experience and interpersonal skills to
	work both in local and international environments.
	PO4: possess creative professionalism, understand their

PROGRAM SPECIFIC OUTCOMES (PSOs)	After this program, the students will be able to: PSO1: describe about agricultural practices from ancient times to modern era. PSO2: apply practical knowledge in crop cultivation Practices. PSO3: describe about Agri-allied sectors. PSO4: work with different farm implements. PSO5: serve the rural agricultural population. PSO6: disseminate recent agricultural technologies through extension. PSO7: perform various Agri-Business activities. PSO8: perform Horticulture and Sericulture practices
-------------------------------------	---

COURSE OUTCOMES (COs)

	SEMESTER-VII		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES	
471	Project Planning, Evaluation and Implementation	After the course, the students will be able to: CO1: make the student familiar with writing of project proposal.	
472	Sericulture and Apiculture	After the course, the students will be able to: CO1: apply skills for beekeeping. History & development of beekeeping in India. Bee keeping equipment, Species and races of bees, bee hive and its characterization. Bee castes, biology, ecology, behavior, communication, foraging strategies. Swarming and absconding. Apiary establishment-beekeeping equipment, bee pasturage. CO2: explain about the colony management, seasonal management. Managing colonies for production of honey, other hive products such as Bee pollen, Royal jelly and Bee venom. Artificial queen rearing. Bee	

		health management. Bee poisoning. Production,
		properties, uses and marketing of good quality honey,
		bee pollen, royal jelly, propolis, beewax, bee venom,
		and value added products of honey.
		CO3: apply skills about the establishment and maintenance
		of apiaries. Beekeeping for pollination- role of honey
		bees in pollinating, agricultural, horticultural and
		tree crops. Beekeeping in integrated farming systems
		and organic farming. History, origin and
		development, study of different species of
		silkworms, characteristic features.
		CO4: explain about the host plants and their cultivation,
		comparative morphology, biology. Rearing and
		management of silk worms, appliances. Pests and
		diseases of silkworms, Silk worm seed technology,
		Cocoon production and post harvest operations.
		Reeling and testing of silk, marketing. Recent
		advances in sericulture.
473	Medicinal and	After the course, the students can:
	Aromatic Plants	CO1: explain about the importance of medicinal and
		aromatic plants in human health, national economy
		aromatic plants in human health, national economy and related industries, classification of medicinal and
		and related industries, classification of medicinal and
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants.
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements;
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical constituents and uses of medicinal plants (Aloe vera,
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical constituents and uses of medicinal plants (Aloe vera, Terminalia bellerica, Stevia, Tinospora cordifolia,
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical constituents and uses of medicinal plants (Aloe vera, Terminalia bellerica, Stevia, Tinospora cordifolia, Black Musali, Thippali, Nux vomica, etc).
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical constituents and uses of medicinal plants (Aloe vera, Terminalia bellerica, Stevia, Tinospora cordifolia, Black Musali, Thippali, Nux vomica, etc). CO3: explain about the climate and soil requirements;
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical constituents and uses of medicinal plants (Aloe vera, Terminalia bellerica, Stevia, Tinospora cordifolia, Black Musali, Thippali, Nux vomica, etc). CO3: explain about the climate and soil requirements; cultural practices; yield of varieties in rose, jasmine,
		and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses, conservation of medicinal plants. CO2: explain about the climate and soil requirements; cultural practices; yield and important chemical constituents and uses of medicinal plants (Aloe vera, Terminalia bellerica, Stevia, Tinospora cordifolia, Black Musali, Thippali, Nux vomica, etc). CO3: explain about the climate and soil requirements; cultural practices; yield of varieties in rose, jasmine, crossandra, chrysanthemum, marigold, tuberose, cut

	spice and aromatic crops like Cellery, Coriander,
	Fennel, Dill Seed, Honey Plant, Funugreek and
	Mentha.
Pomology-I	After the course, the students will be able to:
	CO1: explain about the origin and domestication of
	horticultural plants and definitions. Scope and
	impact of horticultural crops. Classification of
	horticultural plants based on botanical, geographical
	position and parts used. Horticultural zones of India
	and Punjab including hilly and high rainfall zone
	crops.
	CO2: explain about the development of horticulture in
	India – phases in development after independence –
	institutions involved in horticulture. Nutritive value
	and nutra- ceutical properties of horticultural crops
	Growth and development of horticultural plants –
	different stages of growth – juvenile phase,
	flowering and fruiting Physiological changes in
	growth and development – respiration and
	photosynthesis Factors influencing seed, dormancy
	and germination. Factors influencing growth and
	development – soil and light.
	CO3: apply skills about the factors influencing growth and
	development - temperature, rainfall, humidity and
	wind, Propagation – definition, merits and demerits
	 sexual and a sexual propagation.
	CO4: explain about the seed propagation – seed treatments,
	sowing and seedling establishment. Vegetative
	propagation and factors influencing the success of
	vegetative propagation Methods of vegetative
	propagation – cutting and layering. Methods of
	vegetative propagation – grafting and budding.
	CO5: explain about the Influence of rootstock on scion,
	stock / scion relationship. Use of specialized organs
	and structure for propagation.
	Pomology-I

development – temperature, rainf wind, Propagation – definition, m	all, humidity and
wind, Propagation – definition, m	
	nerits and demerits
- sexual and a sexual propagation	n. Seed propagation
- seed treatments, sowing and see	edling
establishment.	
CO7: explain about the vegetative propagation	agation and factors
influencing the success of vegetar	tive propagation
Methods of vegetative propagation	on – cutting and
layering. Methods of vegetative p	propagation –
grafting and budding. Influence o	of rootstock on
scion, stock / scion relationship. U	Use of specialized
organs and structure for propagat	ion.
47EH02 Nursery Production After the course, the students can:	
CO1: explain about the scope and impo	rtance of vegetable
and flower nurseries planning I -	
topography, layout, paths, roads,	
	•
office, store, potting yard plannin	
containers, electricity, fencing, sh	
Propagation structures - greenhou	
chambers, polyhouses – growing	
media, quality of media, soil, sand	
saw dust, sphagnum moss, coco p	
CO2: explain about the propagation – so	
dormancy-methods of breaking d	• •
sowing seed treatment, seed harde	
priming-seed pelleting- methods	of sowing –
irrigation systems- nutrient mana	gement – water
soluble and liquid fertilizers – use	e of biocontrol
agents-growth regulators-plant pr	otection-techniques
to harden the seedlings Transport	and packing of
nursery plants – quality control-sa	ales promotion.
CO3: explain about the varieties and F1	hybrids – seed rate
- seed treatments -sowing - medi	a-management for
water, nutrients and plant protection	on, hardening,

ts, Pests of culture and getables	forest trees like popular, eucalyptus and important ornamental trees.
culture and	A.C
<i>G</i>	After the course, the students can: CO1: explain about the pest: definition and its categories, losses from pests to agricultural crops and their products. Natural Control of insect-pests, factors causing pest outbreak in agriculture. Concept of economic injury and economic thresh hold level. Principal and methods of pest control in reference to IPM- its components viz., physical, legal, cultural, biological and chemical. CO2: explain about the distribution, host range, life cycle, damage and control of insect-pests of winter vegetables (potato tuber moth, potato aphid, white grubs; onion maggots, onion thrips; pea leaf miner, pea aphid, pea pod borer). CO3: apply skills for the distribution, host range, life cycle, damage and control of insect-pests of summer vegetables (melon fruit fly, red pumpkin beetle, hadda beetle; sweet potato weevil) Distribution, host range, life cycle, damage and control of insect-pests of chillies (thrips, aphid, pod borer) and turmeric (rhizome scale, leaf roller). CO4: explain about the distribution, host range, life cycle, damage and control of insect-pests of temperate fruits

		aphis, Tent caterpiller, codling moth, peach stem
		borer, peach leaf curl aphid, peach fruit fly, cherry
		stem borer, walnut weevil, almond weevil)
		Distribution, host range, life cycle, damage and
		control of insect-pests of Sub tropical fruits (citrus
		caterpillar, citrus psylla, citrus leaf miner, citrus
		white fly, bark caterpillar, citrus mealy bug, citrus
		mite, ber fruit fly, ber beetle, litchi bug, bark eating
		caterpillar of loquat).
		SEMESTER-VIII
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
481	Recent Trends in	After the course, the students can:
	Agriculture	CO1: acquire skills about the cultivation of crops for
		biofuels Molecular marker assisted introgression
		Zero tillage concepts
		CO2: explain about the vertical farming Genetically
		engineered crops Advantages and Disadvantages
		Baby corn cultivation and other frozen vegetable
		food.
		CO3: explain about the organic crop cultivation New
		agronomic practices growing crops on raised beds
		e.g. wheat Drip irrigation system.
		CO4: explain about green house cultivation E-commerce,
		the sales in agriculture has been improving WTO –
		Agreement on Agriculture.
482	Irrigation and Water	After the course, the students will be able to:
	Management	CO1: explain about the Irrigation and its importance, Time
		of irrigation. Principal of irrigation, soil moisture
		relationship and tension curve. Methods of moisture
		estimation in soils. Basis for scheduling irrigation to
		crops: plant basis and climatological approach.
		CO2: gain skills about the sources and modes of irrigation,
		irrigation system of Punjab, Flood irrigation, furrow
		irrigation, sub surface irrigation and sprinkler

water. Efficiency of irrigation. Water requirement of different crops. CO3: acquire skills of waterlogging, different types of water movement in soil. Principal of drainage: surface drainage and sub surface drainage. Kind of sub surface drains. CO4: explain about the crop response to quality of irrigation water. Irrigation management and problem, Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production technology of fruits, high density planting. Integrated			irrigation. Methods of measurement of irrigation
CO3: acquire skills of waterlogging, different types of water movement in soil. Principal of drainage: surface drainage and sub surface drainage. Kind of sub surface drains. CO4: explain about the crop response to quality of irrigation water. Irrigation management and problem, Soil irrigation for firost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			water. Efficiency of irrigation. Water requirement of
water movement in soil. Principal of drainage: surface drainage and sub surface drainage. Kind of sub surface drains. CO4: explain about the crop response to quality of irrigation water. Irrigation management and problem, Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture fluits and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			different crops.
surface drainage and sub surface drainage. Kind of sub surface drains. CO4: explain about the crop response to quality of irrigation water. Irrigation management and problem, Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			CO3: acquire skills of waterlogging, different types of
sub surface drains. CO4: explain about the crop response to quality of irrigation water. Irrigation management and problem, Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1- Students familiar with practical area of agriculture and its allied area. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			water movement in soil. Principal of drainage:
CO4: explain about the crop response to quality of irrigation water. Irrigation management and problem, Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1- Students familiar with practical area of agriculture and its allied area. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			surface drainage and sub surface drainage. Kind of
irrigation water. Irrigation management and problem, Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1- students familiar with practical area of agriculture and its allied area. CO2: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			sub surface drains.
Soil irrigation for frost protection. Erosion problems in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			CO4: explain about the crop response to quality of
in Punjab and India. CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. Pomology-II CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			irrigation water. Irrigation management and problem,
CO5: explain about causes and effects of erosion, Factors responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion control measures. 483 Internship in Agricultural related Ind./Vet Hop./Village/Govt. Nurseries 48EH01 Pomology-II CO1: students familiar with practical area of agriculture and its allied area. CO1- Students familiar with practical area of agriculture and its allied area. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			Soil irrigation for frost protection. Erosion problems
responsible for water and wind erosion. Universal soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. 483 Internship in Agricultural related Ind./Vet Hop./Village/Govt. Nurseries After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			in Punjab and India.
soil loss equation. Land use capability classification. Form of wind and water erosion. Different methods of water conservation. Erosion control measures. 483 Internship in Agricultural related Ind./Vet Hop./Village/Govt. Nurseries After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			CO5: explain about causes and effects of erosion, Factors
Form of wind and water erosion. Different methods of water conservation. Erosion control measures. 483 Internship in Agricultural related Ind./Vet Hop./Village/Govt. Nurseries 48EH01 Pomology-II CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			responsible for water and wind erosion. Universal
483 Internship in Agricultural related Ind./Vet Hop./Village/Govt. Nurseries 48EH01 Pomology-II CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			soil loss equation. Land use capability classification.
After the course, the students can: CO1- Students familiar with practical area of agriculture and its allied area. Pomology-II CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			Form of wind and water erosion. Different methods
Agricultural related Ind./Vet Hop./Village/Govt. Nurseries CO1: Students familiar with practical area of agriculture and its allied area. CO3: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			of water conservation. Erosion control measures.
Agricultural related Ind./Vet Hop./Village/Govt. Nurseries CO1- Students familiar with practical area of agriculture and its allied area. CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production	483	Internship in	After the course, the students can:
Hop./Village/Govt. Nurseries CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production		Agricultural related	CO1- Students familiar with practical area of agriculture
Nurseries 48EH01 Pomology-II CO1: apply knowledge of principles of breeding of horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			and its allied area.
horticultural crops improvement of fruits. Importance of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			
of fruits and vegetable in human nutrition. CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production	48EH01	Pomology-II	CO1: apply knowledge of principles of breeding of
CO2: explain the area, production and Contribution of Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			horticultural crops improvement of fruits. Importance
Horticulture fruit crops in National Economy and exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			of fruits and vegetable in human nutrition.
exports. Programmes of development - National Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			CO2: explain the area, production and Contribution of
Horticulture Mission. CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			Horticulture fruit crops in National Economy and
CO3: explain about the growth and development physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			exports. Programmes of development - National
physiology of flowering, fruit set and development, parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			Horticulture Mission.
parthenocarpy and seedlessness. Maturity and ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			CO3: explain about the growth and development
ripening plant growth regulators and their role. Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			physiology of flowering, fruit set and development,
Physiological basis and morphology of flowering and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			parthenocarpy and seedlessness. Maturity and
and fruiting (berry, stone, pome, nut). CO4: gain skills about the Improved production			ripening plant growth regulators and their role.
CO4: gain skills about the Improved production			Physiological basis and morphology of flowering
			and fruiting (berry, stone, pome, nut).
technology of fruits, high density planting. Integrated			CO4: gain skills about the Improved production
i l			technology of fruits, high density planting. Integrated

		nutrient and water management, fertigation precision
		farming in horticulture watershed management for
		promotion of horticulture.
		CO5: explain about the protected cultivation training.
		pruning and canopy management. Genetic
		terminology relation to fruit breeding like self
		incompatibility, type of dichogamy, allopolyploids,
		auto polyploidy, vivipary and heterostyly. Biotic and
		abiotic stress breeding, biotechnological tools for
		breeding for fruits. Micropropogation, meristem
		culture, ovule culture, in vitro pollination.
		CO6: explain about production of bio-agents and bio-
		fertilizer and green house management stionic
		relations and rootstock.
48EH02	Culturing Vegetable	After the course, the students can:
		CO1: explain the types of vegetable garden: kitchen
		garden, market garden, truck garden, floating garden.
		Botanical classification of vegetables crops. Nursery
		raising, seed bed preparation and transplanting of
		vegetable crops.
		CO2: explain about Seed rate, climate and soil requirement
		of important vegetable crops (tomato, brinjal, potato,
		chilli, capsicum, cucarbits, cole crops, root crops)
		Weed management and irrigation, fertilizers and
		manure requirement of tomato, brinjal, potato, chilli,
		capsicum, cucarbits, cole crops, root crops.
		CO3: explain about the harvesting and yield of vegetable
		crops. Tolerance of vegetable crops to soil acidity
		and soil salinity. Isolation distance for certified seed
		production in vegetables.
		CO4: explain about the preservation and processing of
		vegetables. Genetically modified vegetable crops for
		human welfare. Storage life and storage methods for
		vegetables. Growing of off season vegetables in
		green houses and polyhouses.

48EH03	Diseases of Fruits and	After the course, the students can:
	Vegetables	CO1: explain about the symptoms, life cycle, host range
		their management and control of different diseases of
		fruit. like apple, peach, mango, citrus, papaya, sapota,
		grapes, guava.
		CO2: explain about the symptoms, life cycle, host range,
		their management and control of different diseases of
		fruit, fruits like pear, peach, plum, apricot, cherry,
		walnut, almond, strawberry, ber, loquat.
		CO3: explain the symptoms, life cycle, host range their
		management and control of different diseases of
		winter vegetables (cabbage, potato, onion and peas)
		CO4: explain about the symptoms, life cycle, host range
		their management and control of different diseases of
		summer vegetables (brinjal, melon, pupkin, sweet
		potato) Symptoms, life cycle, host range their
		management and control of different diseases of
		chillies and turmeric.
		CO5: explain about symptoms, life cycle, host range their
		management and control of different diseases of
		ornamental plants such as rose, jasmine, gladiolus,

B.SC. (FASHION DESIGNING)

tulip, carnation, marigold, chrysanthemum.

PROGRAM OUTCOMES (POs)	After the completion of this program, the students will be able to:
	PO1: describe about various principles of Fabric
	Construction, Textile Science, History of Art,
	Textile, Costumes, Fashion theories, Styles,
	Marketing and Merchandising.
	PO2: create futuristic design on various domains and
	develop prototypes using draping, flat pattern
	making and stitching.
	PO3: demonstrate Event Management, Teamwork,
	Leadership, Entrepreneurial and Business.

PROGRAM SPECIFIC OUTCOMES (PSOs)	After finishing the program, students will be able to: PSO1: demonstrate their basic foundation in designing
	and have the ability to visually represent by
	illustrations, and visual display of merchandising.
	PSO2: convert their designs into a garment using
	Appropriate construction techniques.
	PSO3: have a strong foundation and understanding of the
	garment manufacturing process and procedures.

COURSE OUTCOMES (COs)

COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
		SEMESTER-I
0002/0092	Punjabi/History and Culture of Punjab	Punjabi (ਕਾਵਿ -ਸੁਮੇਲ) CO1: ਕਵੀ ਭਾਈ ਵੀਰ ਸਿੰਘ- ਦੀਆਂ 'ਕਵਿਤਾ' ਪੜ੍ਹਾਕੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਕੁਦਰਤ ਦੀ ਖੂਬਸੂਰਤੀ, ਰੱਬੀ ਪਿਆਰ ਤੇ ਜ਼ਿੰਦਗੀ ਦੇ ਰੱਝਵਿਆਂ ਚੋਂ ਖੁਸੀ ਲੈਣ ਪ੍ਰਤੀ ਅਨੇਕਾਂ ਵਿਧੀਆਂ ਸਮਝਾਉ ਣੀਆਂ। CO2: ਪ੍ਰੋ: ਪੂਰਨ ਸਿੰਘ:- ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀ ਕੁਦਰਤ, ਕਿਸਾਨ, ਮਜ਼ਦੂਰ ਤੇ ਮਾਂ- ਬੋਲੀ ਦੀ ਅਹਿਮੀਅਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣੀ। CO3: ਧਨੀ ਰਾਮ ਚਾਤ੍ਰਿਕ- ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਤੇ ਦੇਸ਼ ਭਗਤੀ ਨਾਲ ਜੋੜਨ ਦੀ ਤਜਬੀਜ਼ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨਾਲ ਸਾਂਝ ਪਾਉਦੀ ਹੈ। CO4: ਪ੍ਰੋ:ਮੋਹਨ ਸਿੰਘ ਦੀ ਕਵਿਤਾ ਰਾਹੀਂ ਮਾਂ ਬੋਲੀ, ਮਾਂ ਦੇ ਪਿਆਰ ਤੇ ਦੇਸ਼ ਦੀ ਰਾਖੀ ਲਈ ਸਿਪਾਹੀ ਦੇ ਮਨੋਭਾਵਾਂ ਨੂੰ ਬਿਆਨ ਕਰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮਾਂ ਬੋਲੀ ਦੀ ਅਹਿਮੀਅਤ ਬਾਰੇ ਦੱਸਿਆ ਹੈ। CO5: ਬਾਬਾ ਬਲਵੰਤ ਸਿੰਘ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਜ਼ਿੰਦਗੀ ਦੇ ਹਾਲਤਾਂ ਨਾਲ ਜੂਝਣ ਤੇ ਚੜ੍ਹਦੀ ਕਲਾ ਵਿੱਚ ਰਹਿਣ ਦੀ ਪ੍ਰੇਰਨਾ ਮਿਲਦੀ ਹੈ। CO6: ਸਿਵ ਕੁਮਾਰ ਬਟਾਲਵੀ ਦੀ ਕਵਿਤਾਂ ' ਬੇਸ਼ੱਕ ਬ੍ਰਿਹਾ ਦੀ ਕਵਿਤਾ ਹੈ ਪਰ ਜਿਉਣ ਦੀ ਪ੍ਰੇਰਨਾ ਤੇ ਅਸਲੀਅਤ ਤੋਂ ਜਾਣੂੰ ਕਰਵਾਉਦੀ ਹੈ। CO7: ਸੁਰਜੀਤ ਪਾਤਰ ਦੀ ਕਵਿਤਾ ' ਜ਼ਿੰਦਗੀ ਦੀ ਅਸਲੀਅਤ ਨੂੰ ਬੜੀ ਸਮਸ਼ਟਤਾ ਨਾਲ ਪ੍ਰਗਟ ਕਰਦੀ ਹੈ ਤੇ ਵਿਦਿਆਰਥੀ ਦੀ ਸੋਚ ਨੂੰ ਉਤਸ਼ਾਹਤ ਕਰਦੀ ਹੈ।

CO8: ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ ਦੀ ਕਵਿਤਾ ਦੇਸ਼ ਵੰਡ ਤੋਂ ਲੈ ਕੇ ਰਾਜਨੀਤੀ ਦੀਆਂ ਉਲਝਵਾਂ ਨੂੰ ਖੋਲ ਦੀ ਕਵਿਤਾ ਹੈ। CO9: ਐਸ.ਐਸ ਸੀਮਾ ਦੀ ਕਵਿਤਾ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਉਸਾਰੂ ਤੇ ਮੌਜੂਦ ਹਾਲਾਤ ਨਾਲ ਲੋਹਾ ਲੈਣ ਦੀ ਭਾਵਨਾ ਨਾਲ ਭਰਪਰ ਕਵਿਤਾ ਹੈ। Translation into English CO1: By teaching 'poetry' -Sumail Kavi Bhai Vir Singhto the students learn to appreciate nature. CO2: Through the poems of Prof. Puran Singh, to give information about the importance of Nature, farmers, workers, and mother tongue CO3: Punjabi culture and patriotism through the poems of Dhani Ram Chatrik Communicates with students about the practice of connecting with their mother tongue. CO4: Prof. Mohan Singh's poem, Narrates the sentiments of a soldier CO6: The poems of Shiv Kumar Batalvi are of course the poetry of Briha. CO7: Surjit Patar's poem 'The reality of life with great clarity to Expresses and encourages the student's thinking. CO8: Amrita Pritam's poem explores the problems of politics from the partition of the country CO9: The poem of S.S. Seema makes the students aware of the current situation. History and Culture of Punjab: After completion of this course, the students will be able to: CO1: explain about the first civilization of India i.e. Indus Valley Civilization. CO2: explain about Vedic Age, growth of Jainism and

		Buddhism in 6th century B.C. in Punjab.
		CO3: describe about the society and culture under
		Mauryas and Guptas.
		CO4: explain about cultural Orientation i.e. Bhakti
		Movement of India.
		CO5: explain about the youngest religion of the world i.e.
		Sikhism from Shri Guru Nanak Dev Ji to all ten
		Gurus.
		CO6: explain about Martyrdoms in Sikhism.
		CO7: explain about institutional development in Sikhism,
		New policy adopted by Shri Guru Hargobind Sahib
		Ji and Creation of Khalsa.
		CO8: explain about changes in society in the 18th century
		i,e. Social unrest, emergence of Misls and
		institutions: Rakhi, Gurmata, Dal Khalsa.
		CO9: explain about society and culture of the people under
		Maharaja Ranjit Singh.
		CO10: explain about the Physical geographical map of Punjab.
1033	English	After the course, the students will be able to:
		CO1: explain different aspects and forms of
		communication.
		CO2: enhance their listening, speaking, reading and
		writing skills.
		CO3: develop their personality.
		CO4: develop confidence to participate in placement
		drives.
		CO5: show better performance in International English
		testing language examinations like TOEFL, IELTS.
	Basics of Computer	After the course, the students will be able to:
		CO1: describe about the basics of computer.
		CO2: use the knowledge of CAD based application in

		fashion designing.
		CO3: use MS Office.
		CO4: make work assignments in word file and giving
		power point presentations.
	Basic of Design-I	After completing this course, the students will be able to:
		CO1: define design fundamental, elements and principles
		of design.
		CO2: demonstrate figure sketching and drawing.
		CO3: explain what, why and how of illustration
		techniques.
		CO4: describe about Fashion Design concepts and colour
		Theories.
	Needle Crafts-I	After this course, the students will be able to:
	(Theory and Practical)	CO1: do traditional Indian embroidery and the different
		Fabric construction Techniques.
		CO2: do the basic embroidery stitches.
		CO3: make and products with the help of basic
		embroidery stitches.
		CO4: apply various techniques of patchwork, appliqué
		and open work.
		CO5: apply these techniques to develop various products.
1031	Garment	After this course, the students will be able to:
	Construction- I (Theory and Practical)	CO1: use various finishing techniques related to
	(Theory and Tractical)	stitching.
		CO2: determine the seams and stitches according to the
		design and specification.
		CO3: apply the special features, attachments,
		advancements in all aspects of manufacturing.
		CO4: describe about machines and tools used for sewing.
		CO5: differentiate between different garment
		components.
	Garment Design-I	After this course, the students will be able to:
	(Theory and Practical)	CO1: develop the aesthetic and creative sense for
		designing through knowledge of principles of
	1	

		design.
		CO2: apply design sense through color aspects in
		designs.
		CO3: describe the importance of colour and colour
		schemes.
1032	Textile Science-I	After the course, the students will be able to:
	(Theory and Practical)	CO1: identify different types of Fibers
		CO2: describe about different fibers through Microscopic
		appearance, burning test and solubility test for to
		know the fabric type.
		CO3: apply the concept of Fabric Identification on the basis of fabric construction. Woven knitted Non-
		woven Fabric analysis on the basis of the thread count.
	Г	SEMESTER-II
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
0102/0192	Punjabi/History and	After the course, the students will be able to:
	Culture of Punjab	Punjabi (12 ਕਹਾਣੀਆਂ ਦਾ ਸੁਮੇਲ)
		CO1: ਕਥਾ - ਕਿਤਾਬ': ਪਹਿਲੀ ਕਹਾਣੀ 'ਪੁਹਤਾ ਪਾਂਧੀ' ਗੁਰਬਖਸ਼ ਸਿੰਘ ਪ੍ਰੀਤ ਲੜੀ ਦੁਆਰਾ ਲਿਖੀ ਗਈ ਹੈ। ਇਸ ਵਿੱਚ ਮੇਜਰ ਸਾਹਿਬ ਦੇ ਸੁਭਾਅ ਦੇ ਸੁਲੀਕੇ, ਬੋਲ ਚਾਲ ਤੇ ਦੂਸਰਿਆਂ ਦੇ ਕੰਮ ਆਉਣ ਬਾਰੇ ਦੱਸਿਆ ਹੈ।
		CO2: ਪਿ੍ੰ: ਸੁਜਾਨ ਸਿ [°] ਘ ਦੀ ਕਹਾਣੀ 'ਬਾਗਾਂ ਦਾ ਰਾਖਾ' ਕਹਾਣੀ ਵਿੱਚ ਕਵਿਤਾ ਕਾਮਿਆ ਦੀ ਅਪਮਾਨ ਜਨਕ ਸਥਿਤੀ ਦਾ ਵਰਣਨ ਕੀਤਾ ਹੈ।
		CO3: ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ ਦੀ ਕਹਾਣੀ ' ਧਰਤੀ ਹੇਠਲਾ ਬਲਦ। ਮਾਝੇ ਦੇ ਲੋਕ ਮੁਸੀਬਤਾਂ' ਭਰੀ ਜ਼ਿੰਦਗੀ ਵਿੱਚ ਜ਼ਿੰਦਗੀ ਨੂੰ ਜਿਉਣਾ ਜਾਣਦੇ ਹਨ।
		CO4: ਸੁਖਵੰਤ ਕੌਰ ਮਾਨ ਦੀ ਕਹਾਣੀ 'ਚੱਟੂ' 1947 ਦੀ ਭਾਰਤ ਪਾਕ ਵੰਡ ਦੇ ਉੁਜਾੜੇ ਦੇ ਦੁੱਖਾਂ ਤਕਲੀਫਾਂ ਦਾ ਵਰਨਣ ਕੀਤਾ ਹੈ।
		CO5: ਗੁਲਜ਼ਾਰ ਸਿੰਘ ਸੰਧੂ ਦੀ ਕਹਾਣੀ ਠੱਗੀ' ਵਿੱਚ ਮੌਤ ਦੀ ਉਡੀਕ ਰਹੇ ਨਿਰਾਸ਼ ਮਨੁੱਖ ਦੁਆਰਾ ਇਸ ਨੂੰ ਸਮੂਹਿਕ ਹੋਣੀ ਵਜੋਂ ਭੋਗਣ ਵਿੱਚ ਤੱਸਲੀ ਅਨੁਭਵ ਕਰਨਾ ਹੈ।
		CO6: ਮੋਹਣ ਭੰਡਾਰੀ ਦੀ ਕਹਾਣੀ 'ਘੋਟਣਾ' ਨਵੀ ਉਦਯੋਗਿਕ ਸਭਿਅਤਾ ਦੇ ਲਿਹਾਜੇ ਹੋਏ ਹੂਨਰਮਦ ਮਨੁੱਖ ਦੀ ਪੀੜ ਤੇ ਲੋਚਾ ਦਾ ਕਰੁਣਾਮਈ ਚਿਤਰਨ ਹੈ।

CO7: 'ਬੱਚੇ ਦੀ ਸ਼ਰਾਰਤ' ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼ ਦੀ ਰਚਨਾ ਹੈ। ਔਰਤ ਮਨ ਦੇ ਵੇਗਾਂ, ਤਰੰਗਾਂ, ਇਛਾਵਾਂ ਦੁਵਿਧਾਵਾਂ, ਚਲਾਕੀ, ਸਿਆਣਪਾਂ ਤੇ ਖੁਆਰੀਆਂ ਨੂੰ ਵਿਅੰਗਮਈ ਅੰਦਾਜ਼ ਵਿੱਚ ਪੇਸ਼ ਕੀਤਾ ਹੈ।

CO8:. 'ਵਰਿਆਮ ਸੰਧੂ' ਦੀ ਕਹਾਣੀ ' ਚੌਥੀ ਕੂਟ' ਪੰਜਾਬ ਦੇ ਅੱਜ ਕੱਲੂ ਦੇ ਵਾਤਾਵਰਨ ਨੂੰ ਵਿਸ਼ਾ ਬਣਾਇਆ ਹੈ।

CO9: ਜਗਜੀਤ ਬਰਾੜ ਦੀ ਕਹਾਣੀ' ਚਿੱਟੀ ਕਬੂਤਰੀ' ਦਾ ਵਿਸ਼ਾ ਗੋਰੀ ਨਸਲ ਦੀ ਇਸਤਰੀ ਪ੍ਰਤੀ ਆਕਾਸ਼ਣ, ਦੋਗਲਾ ਰੱਵਈਆ ਤੇ ਨੀਵੀ ਸੋਚ ਹੈ।

CO10: ਕਿਰਪਾਲ ਕਜ਼ਾਕ ਦੀ ਕਹਾਣੀ 'ਗੁੰਮਸ਼ੁਦਾ' ਵਿੱਚ ਕਾਮ ਰੁਚੀਆਂ ਨਾਲ ਕੀਤੀ ਖਿਲਵਾੜ ਕਾਰਨ ਮਨੁੱਖੀ ਜੀਵਨ ਵਿੱਚ ਮਚੀ ਉਥਲ- ਪੁਥਲ ਹੈ।

CO11: ਜਸਵਿੰਦਰ ਸਿੰਘ ਦੀ ਰਚਨਾਂ 'ਖੂਹ-ਖਾਤੇ' ਵਿੱਚ ਵਰਤਮਾਨ ਸ਼ਹਿਰੀ ਮਨੁੱਖ ਦੇ ਦੂਜਿਆਂ ਜਿਥੋਂ ਤੱਕ ਆਪਣਿਆਂ ਪ੍ਰਤੀ ਸੁਆਰਥੀ, ਕੋਰੇ, ਮੌਕਾ ਪ੍ਰਸਤ, ਸ਼ੱਕੀ ਤੇ ਅਕ੍ਰਿਤਘਣ ਰਵੱਈਏ ਦੇ ਦੀ ਝਲਕ ਪੇਸ਼ ਕਰਦੀ ਹੈ।

CO12: ਬਲਵਿੰਦਰ ਗਰੇਵਾਲ ਦੀ ਰਚਨਾਂ ਮੋਹ- ਪਾਸ ਦਾ ਵਿਸ਼ਾ ਸਮਾਜ ਵਿੱਚ ਬਦਲੇਖੋਰੀਆਂ ਅਤੇ ਸੁਆਰਥ ਵਿੱਚ ਫਸੇ ਲੋਕਾਂ ਦੀਆਂ ਸੋਚਾਂ, ਸਾਜ਼ਿਸਾਂ ਤੇ ਕਾਰਜਗਾਰੀਆਂ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਸਾਹਮਣੇ ਪੇਸ਼ ਕਰਦਾ ਹੈ।

ਵਿਆਕਰਨ: ਮੁਹਾਵਰੇ, ਪ੍ਰੈ ਸੀ ਰਚਨਾ, ਲੇਖ ਰਚਨਾ, ਧੁਨੀ ਗ੍ਰਾਮ, ਪਰਿਭਾਸ਼ਾ, ਖੰਡੀ ਤੇ ਅਖੰਡੀ ਧੁਨੀਆਂ ਧੁਨੀਆਂ, ਲਗਾਮਾਤਰਾਵਾਂਦੀ ਢੁੱਕਵੀ ਜਾਣਕਾਰੀ ਦੇਣੀ।ਵਿਆਕਰਨ ਹਰੇਕ ਭਾਸ਼ਾ ਦੀ ਰੀੜ ਦੀ ਹੱਡੀ ਹੁੰਦੀ ਹੈ। ਭਾਸ਼ਾ ਸਮਝਣ ਲਈ ਵਿਦਿਆਰਥੀਆਂ ਲਈ ਇਸ ਦਾ ਗਿਆਨ ਜਰੂਰੀ ਹੈ ਜੀ।

Translated into English

- CO1: Katha Kitab': First story 'Puhta Pandhi' by
 Gurbaksh Singh portrays major sahib's character.
- CO2: Kavita Kamiya in the story 'Baagan Da Rakha' by Sujan Singh described a humiliating situation.
- CO3: Kulwant Singh Virak's story 'The Bull under the Earth' tell the people of Punjab know how to live life to the fullest.
- CO4: Sukhwant Kaur Mann's story 'Chattu' is about the sufferings of the 1947 partition of India and Pakistan.
- CO5: In Gulzar Singh Sandhu's Kahani Thaggi' is a despondent man waiting for death.
- CO6: Mohan Bhandari's story 'Ghotna' was brought

about by the new industrial civilization CO7: 'Bachche Di Shararat' is a work of Prem Prakash that presents the experience in a satirical way. CO8: The story of 'Varyam Sandhu' 'Chauthi Koot' to presents the period of terrorism Punjab. CO9: The subject of Jagjit Brar's story 'Chitti Kabutri' is about a white woman. CO10: Kirpal Kazak's story 'Gumushoda' plays with lust due to the upheaval in human life. CO11: Jaswinder Singh's work 'Khuh-Khate' presents urban man's problems CO12: Balvinder Grewal's works Moh-Pas' theme is revenge in society and the thoughts, plots, and activities of people trapped in selfishness. History and Culture of Punjab After competition of this course, the students will be able to: CO1: explain about Colonial Rule in Punjab i.e. Annexation of Punjab Board of Administration. CO2: explain about Western Education introduced by Britishers. CO3: explain about Agriculture Development. CO4: explain about early socio-religious reform in all religions. CO5: explain about Socio-Religious Reform Movement i.e. Arya Samaj Singh Sabha, Ahmadiyas, Ad Dharm Movement. CO6: explain about Development of press & Literature. CO7: explain about the emergence of political Consciousness i.e. Hadar movement, Jallianwala Bagh Massacre.

		CO8: describe about the Gurdwara Reform movement
		i.e major marchas, Activities of Babbar Akalis.
		CO9: describe about the freedom struggle i.e. all
		Monuments.
		CO10: explain about the Partition of Punjab and its
		Aftermath.
		CO11: explain about Post-Independence Punjab
		and it gives knowledge about physical,
		geographical maps.
1037	English	After the course, the students will be able to:
		CO1: explain different aspects and forms of
		communication.
		CO2: enhance their listening, speaking, reading and
		writing skills.
		CO3: develop their personality.
		CO4: develop confidence to participate in placement
		drives.
		CO5: show better performance in International English
		testing language examinations like TOEFL,
		IELTS.
	Computer	After the course, the students will be able to:
	Applications	CO1: use spreadsheet.
		CO2: do formatting and calculations.
		CO3: apply worksheet functions
		CO4: use internet and its applications effectively.
	Basics of Design-II	After the course, the students will be able to:
	(Theory and Practical)	CO1: use & apply design elements like Lines, Shapes,
		Texture & color to form and good design.
		CO2: explain about various types of motifs and their
		placements.
		CO3: develop a design sense through color aspects in
		designs.
		CO4: differentiate between different textures.
	Needle Craft-II	After the course, the students will be able to:

(Theory and Practical)	CO1: apply various techniques of smoking, quilting and
	ribbon work.
	CO2: apply these techniques to develop various products.
Garment	After the course, the students will be able to:
	CO1: handle different fabrics and their suitability.
(Theory and Practical)	CO2: describe about different garment components.
	CO3: use various construction techniques.
Textile Science-II	After the course, the students will be able to:
(Theory and Practical)	CO1: describe about different types of yarns
	CO2: identify and remove various stains.
	CO3: explain about different types of spinning and
	laundry reagents
Garment Design-II	After the course, the students will be able to:
(Theory and Practical)	CO1: do various fashion details and their sketching.
	CO2: style and estimate material for different garments.
	CO3: design children garments.
Environmental and	After the completion of course, the students will be able
Road Safety Education	to:
	CO1: describe about plant and animal distribution
	patterns in relation to biotic and biotic factors.
	CO2: explain about essential characteristics underlying
	Natural ecosystems.
	CO3: describe about the model population and
	community-level dynamics.
	CO4: interpret and present ecological results.
	CO5: identify Global environmental problems.
	CO6: explain about Social issues and Environment
	issue.
	CO7: describe the significance of road safety.
	CO8: state about Police-Public relationship, Traffic
	rule and Traffic signs.
	CO9: describe about Protective provisions against
	domestic and sexual violence.
	CO10: explain about the Protective laws for women.
	CO11: explain about the problem of drugs abuse.
	Garment Construction-II (Theory and Practical) Textile Science-II (Theory and Practical) Garment Design-II (Theory and Practical)

		CO12: describe about the drugs and its effects.
		CO13: describe about the prevention and management
		of drug abuse.
		SEMESTER-III
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOME
	Fashion Illustration on	After the course, the students will be able to:
	Computer (Practical)	CO1: acquire skill to design on full figure croquis to
		detailed specification illustrations.
		CO2: acquire skill to design the basis of research and
		innovative experiment on CAD and function
		for any specialized apparel category.
		CO3: work outward from a point of focus or inspiration
		to develop a complete collection on Computer.
	Garment Design-III	After the course, the students will be able to:
	(Practical)	CO1: do designing and style reading of garments.
		CO2: do designing of adult garments.
		CO3: do style interpretation and material estimation of
		different garments.
1038	Traditional Textiles	After the course, the students will be able to:
	(Theory and Practical)	CO1: explain about traditional textiles.
		CO2: explain about different fabrics, stitches, motifs and
		colors used in traditional embroideries.
		CO3: explain the different traditional textiles of various
		places and their origin.
		CO4: describe the history of traditional textiles through
		the ages in relation to art, techniques.
		CO5: describe about resist dyed, printed textiles and
		other traditional woven textiles.
	Garment	After the course, the students will be able to:
	Construction-III (Practical)	CO1: describe about the basic fundamentals of kid's
	(= ===================================	wear.
		CO2: acquire skill to construct sleeves and collars of
		kids.

		CO3: acquire knowledge and skill to make maximum
		usage of fabric with minimum wastage.
		CO4: acquire skill to stitch and present a design kids
		garment.
1039	Pattern Making-I	After the course, the students will be able to:
	(Theory and Practical)	CO1: acquire knowledge of dart manipulation
		techniques in creating patterns.
		CO2: explain the language of pattern making and
		develop the ability to create designs through the
		flat pattern method.
		CO3: draft child's bodice block, sleeve block and
		collars and manipulate and draft any design.
1040	Fabric Construction-I	After the course, the students will be able to:
1040	(Theory and Practical)	CO1: differentiate between different types of fabric
	(Theory and Tractical)	formation methods.
		CO2: describe the different types of looms.
		CO3: describe different type of weaves and special
		weave effects.
		CO4: differentiate between graphical representations of
		weaves.
1041	Eachien Concents I	After the course, the students will be able to:
1041	Fashion Concepts-I (Theory)	
		CO2: explain about clothing culture.
		CO2: explain about clothing communication and fashion
		expression in students.
		CO3: explain the concepts related to the various fashion
		processes. CO4: identify different art mediums and its application.
		CO5: create an overview of elements and principles of
		design.
	T	SEMESTER-IV
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
	Fashion Illustration	After completion of the course, the student will be able to:
	(Practical)	

		CO1: acquire skill to design on full figure croquis to detailed specification drawings with swatches, trimmings and details. CO2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and innovative experiment on fabric & Co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the basis of research and the co2: acquire skill to design the co2:
		for any specialized apparel category. CO3: work outward from a point of focus or inspiration to develop a design.
1045	History of Indian Costumes (Theory)	After the course, the students will be able to: CO1: describe the different traditional Indian costumes of various places and their origin. CO2: explain the history of costume through the ages costumes in relation to art, fabric. CO3: explain about footwear, head dress and other accessories during different periods.
1046	Traditional Embroideries (Theory and Practical)	After the course, the students will be able to: CO1: describe the different traditional embroideries of various places and their origin. CO2: describe the history of traditional embroideries through the ages in relation to thread, stitch and fabric. CO3: explain colors, motifs and other techniques of different traditional embroideries.
1047	Fabric Construction-II (Theory and Practical)	After the course, the students will be able to: CO1: explain about different types of fabric formation methods. CO2: describe the different types of knitting machines. CO3: explain about different type of knitting machine needles and their working. CO4: explain about decorative fabric construction.
	Garment Construction-IV (Practical)	After the course, the students will be able to: CO1: acquire construction skills for basic garments for children. CO2: acquire skill to design a kid's wear draft a pattern

		and layout of paper drafts on the fabric.
		CO3: acquire knowledge and skill to make maximum
		usage of fabric with minimum wastage.
		CO4: acquire skill to stitch and present kids garment.
	Pattern Making-II	After the course, the students will be able to:
	(Practical)	CO1: explain about methods/techniques of creating
		pattern for a design Interpret and design and obtain
		knowledge on body measurement.
		CO2: experimental practical exercise.
1918	Fashion Concepts-II	After the course, the students will be able to:
	(Theory)	CO1: explain about clothing culture.
		CO2: describe the impact of clothing communication
		and fashion expression in students.
		CO3: explain the concepts related to the various
		fashion terms.
		CO4: identify source of inspiration.
		CO5: create an overview of concepts of design
		process.
	Knitting	After the course, the students will be able to:
	(Practical)	CO1: develop practical skills of knitting.
		CO2: explain about knitting tools and material.
		CO3: explain about different types of knitting methods.
		SEMESTER-V
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOME
	Pattern and Marker	After completion of course the students will be able to:
	Making on Computer-	CO1: use advanced computer aided designing and
	I (Practical)	presentation software's.
		CO2: apply the knowledge of pattern making software
		for making patterns and grading.
		CO3: develop the skill of computer aided pattern making.
	Pattern Making-III	After the course, the students can:
	(Practical)	CO1: acquire knowledge of dart manipulation techniques
		in creating patterns.
	•	200

		CO2: describe the language of pattern making and
		develop the ability to create designs through the flat
		pattern method.
		CO3: draft basic skirt block, adaptation of skirt into
		different styles and grading of basic bodice, sleeve
		block and basic skirt block.
	Line Development and	After the course, the students can:
	Portfolio-I	CO1: apply the principles and knowledge of garment
	(Practical)	design development to create a collection.
		CO2: explain the meaning and importance of making a
		good portfolio.
		CO3: identify, organize, and gather documentation to
		build portfolios.
		CO4: explain the importance and significance of
		portfolios and presentations.
		CO5: prepare a creative portfolio which includes the
		best of their skills and talents.
1910	History of World	After the course, the students can:
	Costumes	CO1: develop an in-depth understanding of the evolution
	(Theory)	of clothing.
		CO2: realize the importance of Ancient civilization
		costumes.
		CO3: explain about Egyptian, Greecian, Roman and
		French costumes & Damp; accessories.
		CO4: acquire knowledge on the Medieval and
		Renaissance period.
		CO5: explain the history of world costume through the
		ages costumes in relation to art, fabric.
		CO6: explain about footwear, head dress and other
		accessories during different periods.
	Garment	After the course, the students can:
	Construction-V	CO1: acquire knowledge about construction skills for
	(Practical)	different garments.
		CO2: get skilled to design adult wear draft a pattern and
		layout of paper drafts on the fabric.
L	•	201

		CO3: get skilled to make maximum usage of fabric with minimum wastage. CO4: acquire skill to stitch blouse and other garments.
1053	Apparel Manufacturing Technology (Theory)	After the course, the students can: CO1: explain about the Apparel Industry and its type. CO2: explain about work flow and machineries used in Apparel sector. CO3: describe about production process in Apparel sector. CO4: tell about different departments of apparel industry and its work.
1911	Textile Dyeing (Theory and Practical)	After the course, the students can: CO1: explain the different processing methods in textiles. CO2: explain about textile dyeing & techniques. CO3: explain about various dyeing method. CO4: acquire a practical knowledge on textile dyeing
		SEMESTER-VI
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
	Pattern and Marker Making on Computer- II (Practical)	After the course, the students can: CO1: use advanced computer aided designing and presentation software. CO2: use pattern making software for making patterns and grading.
1054	Marketing and Merchandising (Theory and Practical)	After the course, the students can: CO1: get awareness regarding marketing. CO2: study and analyze the fashion market. CO3: explain the concept of merchandising. CO4: explain regarding customer relationship.
	Pattern Making-IV (Practical)	After the course, the students can: CO1: acquire knowledge of draping techniques. CO2: describe the language of pattern making and

draping method. CO3: drape basic bodice block, top, basic skirt and skirt with flare. Line Development and Portfolio-II (Theory and Practical) Garment Construction-VI (Practical) (Practical) Textile Printing and Finishing (Theory and Practical) Textile Printing and Development (Theory) After the course, the students can: CO3: acquire construction skills for basic garments. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:			develop the ability to create designs through
Skirt with flare.			draping method.
Line Development and Portfolio-II (Theory and Practical) Garment Construction-VI (Practical) CO2: prepare a creative E portfolio which includes the best of their skills and talents. CO3: acquire construction skills for basic garments. CO3: design different garments draft a pattern and layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:			CO3: drape basic bodice block, top, basic skirt and
Portfolio-II (Theory and Practical) CO1: explain the importance and significance of portfolios and presentations. CO2: prepare a creative E portfolio which includes the best of their skills and talents. After the course, the students can: CO1: acquire construction skills for basic garments. CO2: design different garments draft a pattern and layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. Textile Printing and Finishing (Theory and Practical) Finishing (Theory and Practical) CO2: acquire a practical knowledge on textile printing techniques. CO3: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:			skirt with flare.
(Theory and Practical) (Theory and Practical) (Theory and Practical) (CO2: prepare a creative E portfolio which includes the best of their skills and talents. (CO2: prepare a creative E portfolio which includes the best of their skills and talents. (CO3: acquire construction skills for basic garments. (CO2: design different garments draft a pattern and layout of paper drafts on the fabric. (CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. (CO4: stitch and present a design top, skirt and one piece dress. (CO4: stitch and present a design top, skirt and one piece dress. (CO4: explain the different processing methods in textiles. (CO2: acquire a practical knowledge on textile printing techniques. (CO4: acquire a practical knowledge on textile printing techniques. (CO5: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. (CO2: develop entrepreneurial orientation to innovation and creativity. (CO3: explain the basic principles involved in starting and managing a new enterprise. After the course, the students can: (CO1: explain the topics related to fashion designing. After the course, the students can:		Line Development and	After the course, the students can:
CO2: prepare a creative E portfolio which includes the best of their skills and talents. Garment Construction-VI (Practical) (Practical) (Practical) (Practical) (CO2: design different garments draft a pattern and layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. Textile Printing and Finishing (Theory and Practical) (Theory and Practical) CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO2: acquire a practical knowledge on textile printing techniques. CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:		Portfolio-II	CO1: explain the importance and significance of
March includes the best of their skills and talents. Garment Construction-VI (Practical) (Practical) (CO2: design different garments draft a pattern and layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. Textile Printing and Finishing (Theory and Practical) Textile Printing and Practical) Textile Printing and Finishing (Theory and Practical) After the course, the students can: CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:		(Theory and Practical)	portfolios and presentations.
Garment Construction-VI (Practical) After the course, the students can: CO1: acquire construction skills for basic garments. CO2: design different garments draft a pattern and layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:			CO2: prepare a creative E portfolio
Construction-VI (Practical) (Practical) (CO2: design different garments draft a pattern and layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO2: acquire a practical knowledge on textile printing techniques. CO4: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO5: prepare the platform where the students view entrepreneurship and designable career option. CO6: develop entrepreneurial orientation to innovation and creativity. CO7: explain the basic principles involved in starting and managing a new enterprise. After the course, the students can: CO1: explain the topics related to fashion designing. After the course, the students can:			which includes the best of their skills and talents.
(Practical) (Practical) (CO2: design different garments draft a pattern and layout of paper drafts on the fabric. (CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. (CO4: stitch and present a design top, skirt and one piece dress. Textile Printing and Finishing (Theory and Practical) (CO1: explain the different processing methods in textiles. (CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: (CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. (CO2: develop entrepreneurial orientation to innovation and creativity. (CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: (CO1: explain the topics related to fashion designing. Internship After the course, the students can:		Garment	After the course, the students can:
layout of paper drafts on the fabric. CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. 1055 Textile Printing and Finishing (Theory and Practical) CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. 1056 Entrepreneurship and Development (Theory) (Theory) CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:		Construction-VI	CO1: acquire construction skills for basic garments.
CO3: acquire knowledge and skill to make maximum usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. After the course, the students can: CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:		(Practical)	CO2: design different garments draft a pattern and
usage of fabric with minimum wastage. CO4: stitch and present a design top, skirt and one piece dress. 1055 Textile Printing and Finishing (Theory and Practical) Entrepreneurship and Development (Theory) Theory Textile Printing and Finishing (Theory and Practical) Development (Theory) Textile Printing and After the course, the students can: CO2: acquire a practical knowledge on textile printing techniques. CO3: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			layout of paper drafts on the fabric.
CO4: stitch and present a design top, skirt and one piece dress. 1055 Textile Printing and Finishing (Theory and Practical) (Theory and Practical) Entrepreneurship and Development (Theory) (Theory) CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			CO3: acquire knowledge and skill to make maximum
piece dress. Textile Printing and Finishing (Theory and Practical) Entrepreneurship and Development (Theory) (Theory) Entrepreneurship and Development (Theory) After the course, the students can: CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			usage of fabric with minimum wastage.
Textile Printing and Finishing (Theory and Practical) Entrepreneurship and Development (Theory) (Theory) (Theory) Entrepreneurship and Development (Theory) Entrepreneurship and Self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			CO4: stitch and present a design top, skirt and one
Finishing (Theory and Practical) CO1: explain the different processing methods in textiles. CO2: acquire a practical knowledge on textile printing techniques. Interpreneurship and Development (Theory) CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			piece dress.
(Theory and Practical) (CO2: acquire a practical knowledge on textile printing techniques. Entrepreneurship and Development (Theory) (Theory) (Theory) (CO2: develop entrepreneurial orientation to innovation and creativity. (CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: (CO1: explain the topics related to fashion designing. Internship After the course, the students can:	1055	Textile Printing and	After the course, the students can:
CO2: acquire a practical knowledge on textile printing techniques. Internship CO2: acquire a practical knowledge on textile printing techniques. After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:		Finishing	CO1: explain the different processing methods in
techniques. Internship and Development (Theory) Entrepreneurship and Development (Theory) (Theory) After the course, the students can: CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:		(Theory and Practical)	textiles.
1056 Entrepreneurship and Development (Theory) CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			CO2: acquire a practical knowledge on textile printing
CO1: prepare the platform where the students view entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			techniques.
(Theory) entrepreneurship and self-employment as a desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:	1056	Entrepreneurship and	After the course, the students can:
desirable career option. CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:		Development	CO1: prepare the platform where the students view
CO2: develop entrepreneurial orientation to innovation and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:		(Theory)	entrepreneurship and self-employment as a
and creativity. CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			desirable career option.
CO3: explain the basic principles involved in starting and managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			CO2: develop entrepreneurial orientation to innovation
managing a new enterprise. Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			and creativity.
Seminar After the course, the students can: CO1: explain the topics related to fashion designing. Internship After the course, the students can:			CO3: explain the basic principles involved in starting and
CO1: explain the topics related to fashion designing. Internship After the course, the students can:			managing a new enterprise.
Internship After the course, the students can:		Seminar	After the course, the students can:
			CO1: explain the topics related to fashion designing.
		Internship	
CO1: develop practical skills of knitting.			CO1: develop practical skills of knitting.

M.A. (PUNJABI)

PROGRAM OUTCOMES (POs)	P01: ਐਮ.ਏ ਪੰਜਾਬੀ ਦੇ ਵਿਦਿਆਰਥੀ ਨੂੰ ਮੱਧਕਾਲੀ ਤੇ ਆਧੁਨਿਕ ਸਾਹਿਤ ਪੜ੍ਹਨ ਦੀ ਪ੍ਰੇਰਨਾ ਮਿਲਦੀ ਹੈ। ਗੁਰੂ ਗ੍ਰੰਥ ਸਾਹਿਬ, ਮੱਧਕਾਲੀ ਸਾਹਿਤ ਦੀਆਂ ਵਿਸ਼ੇਸਤਾਵਾਂ, ਸੂਫੀ ਕਾਵਿ ਪੜ੍ਹਨ ਦਾ ਮੌਕਾ ਮਿਲਦਾ ਹੈ।
	PO2: ਐਮ. ਏ ਪੰਜਾਬੀ ਤੋਂ ਬਾਅਦ ਰਿਸਾਰਚ, ਐਮ.ਫਿਲ, ਪੀ.ਐਚ.ਡੀ ਦੀ ਪੜ੍ਹਾਈ ਕਰਨ ਦੇ ਕਈ ਸੋਮੇ ਮਿਲਦੇ ਹਨ।
	PO3: ਐਮ.ਏ ਤੋਂ ਬਾਅਦ ਉਚ ਯੋਗਤਾ ਪ੍ਰਾਪਤ ਕਰਨ ਤੋਂ ਬਾਅਦ, ਲੈਕਚਰਾਰ, ਸਕੂਲ, ਅਧਿਆਪੁਕ, ਵਿਸ਼ਾ- ਮਾਹਿਰ ਤੇ ਭਾਸ਼ਾ ਵਿਭਾਗ ਦੀਆਂ ਅਨੇ ਕਾਂ ਪੋਸਟਾਂ ਦੇ ਮੌਕੇ ਲੈ ਸਕਦੇ ਹਨ।
	PO4: ਐਮ.ਏ ਪੰਜਾਬੀ ਵਿਦੇਸ਼ਾ ਵਿੱਚ ਦੀ ਪੜ੍ਹਾਈ ਜਾਂਦੀ ਹੈ, ਉਧਰ ਵੀ ਪੰਜਾਬੀ ਅਧਿਆਪਕ ਦੀ ਨੌਕਰੀ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।
	PO5: ਵਿਸ਼ਾ ਮਾਹਿਰ ਦੀ ਪੋਸਟ, ਅਨੁਵਾਦਿਕ ਪੰਜਾਬੀ ਦੇ ਟਾਈਪਿਸਟ ਸਟੈਨੋਂ ਦੀ ਨੌਕਰੀ ਉਪਲਬਧ ਹੋ ਸਕਦੀ ਹੈ।
	Translation in English
	PO1: A student gets inspiration to read medieval and modern
	literature. He/She has an opportunity to study Guru
	Granth Sahib, features of medieval literature and Sufi
	poetry.
	PO2: After the completion of this programme, a student has
	many opportunities like to pursue the Research, M.
	Phil. and Ph.D.
	PO3: After obtaining higher qualification, one can avail
	manifold opportunities like teacher, lecturer, subject-
	specialist and linguist in the department of language.
	PO4: This progamme is taught abroad and where one can also
	get a job as a Punjabi teacher.
	PO5: Posts of subject expert, translator, and Steno Typist
	(Punjabi) are available for the students.

PROGRAM SPECIFIC
OUTCOMES (PSOs)

PSO1: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਾਹਿਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ।

PSO2: ਸੱਭਿਆਚਾਰ, ਸਿਧਾਂਤ ਤੇ ਪ੍ਰਵਿਰਤੀਆਂ ਪ੍ਰਤੀ ਲਗਨ ਪੈਦਾ

ਕਰਨਾ।
PSO3: ਲੋਕ ਸਾਹਿਤ, ਲੋਕ ਕਾਵਿ ਤੇ ਆਧੁਨਿਕ ਕਾਵਿਤਾ ਬਾਰੇ ਜਾਣੂ ਕਰਵਾਉਦਾ।
PSO4: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਲਾਇਬ੍ਰੇਰੀ ਦੀ ਮਹੱਤਤਾ, ਲੋੜ ਤੇ ਚੰਗੇ ਸਾਹਿਤ ਬਾਰੇ ਚਾਨਣ ਪਾਉਣਾ
PSO5: ਨਾਵਲ ਪੜ੍ਹਨ ਲਈ ਪ੍ਰੇਰਿਤ ਕਰਨਾ ਖਾਸ ਕਰਕੇ ਨਾਨਕ ਸਿੰਘ ਨਾਵਲਕਾਰ, ਦਲੀਪ ਕੌਰ ਟਿਵਾਣਾ ਤੇ ਪਾਕਿਸਤਾਨੀ ਨਾਵਲ ਪੜ੍ਹਨ ਦੀ ਰੂਚੀ ਪੈਦਾ ਕਰਨਾ
Translation in English
PSO1: To give information about Punjabi language and
literature to the students.
PSO2: To create interest among students for culture,
Principles and practices.
PSO3: To acquaint students with folk literature, folk poetry
And modern poetry.
PSO4: To encourage the students to read Eastern and
Western literature that throws flood of light on various
topics.
PSO5: To motivate students to read novels written by Nanak
Singh, Dalip Kaur Tiwana and Pakistani novels and

COURSE OUTCOMES (COs)

prepare them to read fiction and stories.

SEMESTER-I		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
2364	Paper-1st 'ਮੱਧਕਾਲੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ'	CO1: ਮੱਧਕਾਲੀਨ ਸਾਹਿਤ ਦੇ ਅਧਿਐਨ ਕਰਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਗੁਰਬਾਣੀ, ਗੁਰੂ-ਕਾਵਿ, ਪੂਰਵ ਨਾਨਕ ਕਾਲ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮੱਰਥ ਬਣਦੇ ਹਨ, ਉਸ ਸਮੇਂ ਦੇ ਯਾਨੀ 1500 ਤੋਂ ਪਹਿਲਾਂ ਤੇ ਬਾਅਦ ਨਾਥ ਜੋਗੀ, ਸੂਫੀ ਕਾਵਿ ਦੀ ਡੂੰਘੀ ਜਾਣਕਾਰੀ ਤੇ ਗੁਰੂ ਗ੍ਰੰਥ ਸਾਹਿਬ ਦੇ ਦੀਆਂ ਅਧਿਐਨ ਕਰਨ ਦੀ ਲਗਨ ਪੈਦਾ ਹੁੰਦੀ ਹੈ। CO2: ਗੁਰੂ ਕਾਵਿ ਤੇ ਲੋਕ ਕਾਵਿ ਨੂੰ ਆਧਨਿਕ ਵਿਧੀ ਦੇ ਤੁਲਨਾਤਮਕ ਅਧਿਐਨ ਦੀ ਦਿਲਚਸਪੀ ਵਿਦਿਆਰਥੀਆਂ

ਵਿਚ ਪੈਦਾ ਹੁੰਦੀ ਹੈ ।

CO3: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ (1501-1850) ਈ. ਤੱਕ ਸੂਫੀ-ਕਾਵਿ, ਗੁਰਮਤਿ ਕਾਵਿ, ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਦਾਰਸ਼ਨਿਕ ਅਤੇ ਅਧਿਆਤਮਕ ਗਿਆਨ ਦੀ ਪ੍ਰਾਪਤੀ ਕਰਦੇ ਹਨ।

CO4: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸੂਫੀ ਕਾਵਿ-ਬਾਬਾ ਫਰੀਦ, ਲੋਕ ਕਾਵਿ ਤੇ ਸਮੁਚੇ ਪੁਰਾਤਨ ਤੇ ਆਧੁਨਿਕ ਸੱਭਿਆਚਾਰ ਦੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ

CO5: ਇਨਾਂ ਵਿਧਾਵਾ ਦੇ ਅਧਿਐਨ ਨਾਲ ਸਮੁੱਚੀ ਮਾਨਵਤਾ ਦੀ ਬਿਹਤਰੀ ਅਤੇ ਪੂਰਵ ਨਾਲ ਕਾਲ ਤੇ ਨਾਨਕ ਕਾਲ ਤੋਂ ਬਾਅਦ ਦੇ ਸਮੁੱਚੇ ਸਾਹਿਤ ਦਾ ਵਿਧੀ ਪੂਰਵਕ ਗਿਆਨ ਹਾਸਿਲ ਹੁੰਦਾ ਹੈ।

CO6: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਸਮੁੱਚੇ ਅਧਿਐਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਉਸ ਸਮੇਂ ਦੀ ਸਮਾਜਿਕ, ਆਰਥਿਕ ਤੇ ਸੱਭਿਆਚਾਰਕ ਪ੍ਰਸਥਿਤੀਆਂ ਦਾ ਗਿਆਨ ਪ੍ਰਾਪਤ ਹੁੰਦਾ ਹੈ । ਕਿੱਸਾ ਕਾਵਿ, ਬੀਰ ਕਾਵਿ, ਮੱਧਕਾਲੀ ਵਾਰਤਕ ਦਾ ਨਿਕਾਸ ਤੇ ਨਿਕਾਸ ਤੇ ਵਿਕਾਸ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸੱਭਿਆਚਾਰ ਦੇ ਡੂੰਘੇ ਅਧਿਐਨ ਦੀ ਲਗਨ ਪੈਦਾ ਕਰਦੇ ਹਨ ਅਤੇ ਇਸਦੀ ਮਹੱਤਤਾ ਨੂੰ ਸਮਝਦੇ ਹਨ।

CO7: ਮੱਧਕਾਲੀ ਸਾਹਿਤ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਉਸ ਸਮੇਂ ਦੀਆਂ ਸਾਹਿਤਕ ਰਾਜਨੀਤਿਕ, ਸੱਭਿਆਚਾਰਕ ਅਤੇ ਲੋਕਧਾਰਈ ਪ੍ਰਸਥਿਤੀਆਂ ਤੋਂ ਜਾਣੂ ਹੁੰਦੇ ਹਨ। ਇਨਾਂ ਕਲਾਵਾਂ ਨੂੰ ਸਮਝਣਾ ਤੇ ਅਨੁਭਵ ਕਰਨ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।

CO8: ਸੂਫੀ ਕਾਵਿ ਵਿੱਚ ਬਾਬਾ ਫਰੀਦ ਦੇ 112 'ਸਲੋਕ ਜਿਹੜੇ ਕਿ ਗੁਰੂ ਗ੍ਰੰਥ ਸਾਹਿਬ ਵਿੱਚ ਦਰਜ ਹਨ, ਪੰਜਾਬੀ ਬੋਲੀ ਤੇ ਵਾਰਾਂ ਦੀ ਧੁਨੀ ਦਾ ਜਿਕਰ ਵਿਦਿਆਰਥੀ ਅੰਦਰ ਗੁਰੂ ਕਵੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਸਭ ਤੋਂ ਵੱਡਾ ਜਰੀਆ ਬਣਦੇ ਹਨ।

CO9: ਸੂਫੀ ਕਾਵਿ ਤੇ ਗੁਰਮਤਿ ਕਾਵਿ ਦੀ ਸਾਂਝ ਤੇ ਇਸਦਾ ਤੁਲਾਨਤਮਕ ਅਧਿਐਨ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮੌਜੂਦਾ ਜ਼ਿੰਦਗੀ ਦੇ ਸੰਧਰਭ ਵਿੱਚ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਾਉਦਾ ਹੈ।

Translation in English

CO1: The study of medieval literature enables students to understand Gurbani, Guru-Kav, Pre Nanak Era, Naths and Jogis of 15th century and creates interest to study Sufi poetry and Guru Granth Sahib.

CO2: It encourages students to make the comparative

		study of poetry composed by Gurus and folk
		poetry with modern methods.
		CO3: Students acquire philosophical and spiritual
		knowledge of the history of medieval Punjabi
		literature (1501-1850) AD through the study of
		Sufi-poetry and Gurmat poetry.
		CO4: Students get knowledge about the Sufi poetry
		especially of Baba Farid, folk poetry and
		complete ancient and modern culture.
		CO5: The study of these genres teaches us the lesson of
		human betterment and provides the systematic
		knowledge of the entire literature of the pre and
		post Nanak period.
		CO6: With the overall study of medieval Punjabi
		literature, students come to know about the social,
		economic and cultural conditions of that time. The
		genres like Kissa Kav, Veer Kav and the
		emergence and evolution of medieval prose
		encourage students to have a deep knowledge of
		culture and understand its importance.
		CO7: Medieval literature familiarizes students with the
		literary, political, cultural and folkloric contexts
		of the time and enables them to understand and
		experience these arts.
		CO8: There are 112 Sufi slokas of Baba Farid inscribed
		in the Guru Granth Sahib. The knowledge of
		Punjabi language and the sound of the vaars
		Encourage students to know and understand the
		Gurus and poets.
		CO9: A comparative study of the relationship between
		Sufi poetry and Gurmat poetry enables the
		students to understand life in the current context.
2365	ਪੇਪਰ ਦੂਜਾ- ਸਾਹਿਤ	C01: ਪੰਜਾਬੀ ਆਲੋਚਨਾ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ
	ਸਿਧਾਂਤ, ਸਨਾਤਨੀ	ਦੀਆ ਪਰਤਾਂ ਨੂੰ ਸਮਾਜ ਅਤੇ ਸਭਿਆਚਾਰ ਦੇ ਵੱਖ-ਵੱਖ

ਕਾਵਿ-ਸ਼ਾਸਤਰ ਅਤੇ	ਪ੍ਰਸੰਗਾਂ ਵਿੱਚ ਸਮਝਣ ਦੇ ਯੋਗ ਹੋ ਜਾਂਦੇ ਹਨ।
ਪੰਜਾਬੀ ਆਲੋਚਨਾ	CO2: ਸ਼ਾਹਿਤ ਸਿਧਾਂਤ ਸੰਬੰਧੀ ਜਦੋਂ ਵਿਦਿਆਰਥੀ
an al modo	ਅਧਿਐਨ ਕਰਦੇ ਹਨ ਤਾਂ ਉਨ੍ਹਾਂ ਨੂੰ ਸਾਹਿਤ ਬਾਰੇ ਉਸ ਦੇ
	ਵੱਖ-ਵੱਖ ਪਸਾਰਾਂ ਜਿਵੇਂ ਪ੍ਰਕਿਰਤੀ, ਪ੍ਰਯੋਜਨ ਆਦਿ ਬਾਰੇ
	ਜਾਣਕਾਰੀ ਹੁੰਦੀ ਹੈ।
	CO3: ਸਾਹਿਤ ਦੀਆਂ ਵੱਖ-ਵੱਖ ਧਾਰਾਵਾਂ, ਰਹੱਸਵਾਦ,
	ਰੁਮਾਂਸਵਾਦ, ਪਦਾਰਥਵਾਦ ਆਦਿ ਦੀ ਜਾਣਕਾਰੀ ਰਾਹੀਂ
	ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਦੀ ਪ੍ਰਕਿਰਤੀ ਸੰਬੰਧੀ ਸਮੁੱਚੀ
	ਜਾਣਕਾਰੀ ਹਾਸਲ ਹੁੰਦੀ ਹੈ।
	CO4: ਗਰੀਕੋ ਰੋਮਨ ਕਾਵਿ-ਸ਼ਾਸਤਰ ਰਾਹੀਂ ਅਰਸਤੂ,
	ਲੌਜਾਂਇਨਜ਼ ਆਦਿ ਜਿਹੇ ਵਿਦਵਾਨਾਂ ਦੇ ਸਾਹਿਤ ਨਾਲ
	ਵਿਦਿਆਰਥੀਆ ਦੀ ਸਾਂਝ ਵੱਧਦੀ ਹੈ ਅਤੇ ਉਨ੍ਹਾਂ ਵਿੱਚ
	ਰਚਨਾਤਮਕ ਬਿਰਤੀ ਉਜਾਗਰ ਹੁੰਦੀ ਹੈ।
	C05: ਭਾਰਤੀ ਕਾਵਿ-ਸ਼ਾਸਤਰ ਦਾ ਅਧਿਐਨ ਕਰਦੇ ਸਮੇਂ
	ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਰਸ ਸੰਪਰਦਾਇ, ਧੂਨੀ ਸੰਪਰਦਾਇ,
	ਅਲੰਕਾਰ ਸੰਪਰਦਾਇ ਦੀ ਸਮਝ ਪੈਂਦੀ ਹੈ। ਇਸ ਤਰ੍ਹਾਂ
Literary Theory,	ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਰਚਨਾ ਕਰਨ ਵਿੱਚ ਸੁਖੈਨਤਾ
Traditional Poetics, and, Punjabi Criticism	ਹਾਸਲ ਹੁੰਦੀ ਹੈ।
	Punjabi outcomes translated into English
	CO1 Through Punjabi criticism students can understand
	the layers of literature in different contexts of
	society and culture.
	CO2 Regarding literaryTheory When students study,
	they have knowledge about literature in its various
	aspects like nature, purpose, etc,
	CO3 Through the knowledge of various streams of
	literature, mysticism, romanticism, materialism,
	etc,., the students get the overall knowledge about
	the nature of literature.

		CO4 Through Greco-Roman poetry, the association of students with the literature of scholars like Aristotle, etc. increases, and, the creative spirit is revealed in them. CO5 While studying Indian poetics, students get to understand the rather sect, sound sect, meta, and or sect. In this way, students get ease in creating literature.
2366	Paper 3 Opt 1 ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ	CO1: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲ ਦੇ ਸਮੇਂ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ-ਨਾਲ ਰਹੱਸਵਾਦ, ਅਧਿਆਤਮਵਾਦ ਅਤੇ ਗੁਰਮਤਿ ਦੇ ਸਿਧਾਂਤਾ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹਨ । ਉਸ ਸਮੇਂ ਦੀਆਂ ਸਮਾਜਿਕ, ਆਰਥਿਕ, ਸਭਿਆਚਾਰਕ ,ਰਾਜਨੀਤਿਕ ਅਤੇ ਇਤਿਹਾਸਕ ਪ੍ਰਸਥਿਤੀਆਂ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ-ਨਾਲ ਨੈਤਿਕ ਮੁੱਲਾਂ ਨਾਲ ਜੁੜ ਕੇ ਚੰਗੀ ਜੀਵਨ ਸਿੱਖਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ । ਵਿਦਿਆਰਥੀ ਗੁਰੂ ਸਾਹਿਬਾਨਾਂ, ਸੂਫੀ ਕਵੀਆਂ ਅਤੇ ਕਿੱਸਾਕਾਰਾਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਰਾਹੀਂ ਪੰਜਾਬੀ ਦੇ ਮੁਢਲੇ ਸਾਹਿਤ ਦੀ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕਰਕੇ ਰਚਨਾਕਾਰਾਂ ਦੀ ਉਚੇਰੀ ਤੇ ਡੂੰਘੀ ਸੂਝ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ । ਮੱਧਕਾਲ ਦੇ ਸਮੇਂ ਦੀਆਂ ਵੱਖ-ਵੱਖ ਵੰਨਗੀਆਂ (ਵਾਰ, ਸਲੋਕ, ਸ਼ਬਦ, ਕਾਫੀ ਅਤੇ ਕਿੱਸੇ ਆਦਿ) ਦੇ ਵਿਸ਼ੇਗਤ ਅਤੇ ਕਲਾਤਮਕ ਨਿਯਮਾਂ ਤੋਂ ਜਾਣੂੰ ਹੁੰਦੇ ਹਨ। ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲ ਦੇ ਸਮੇਂ ਦੀਆਂ ਪ੍ਰਸਥਿਤੀਆਂ ਅਤੇ ਵੱਖ-ਵੱਖ ਪ੍ਰਵਿਰਤੀਆਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਦੇ ਹੋਏ ਮੱਧਕਾਲ ਦੇ ਦਾਰਸ਼ਨਿਕ ਪਿਛੋਕੜ ਬਾਰੇ ਸੂਝ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ । CO2: ਸ਼੍ਰੀ ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ ਦੀ ਰਚਨਾ 'ਜਪੁਜੀ ਸਾਹਿਬ' ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਦਾਰਸ਼ਨਿਕ ਅਤੇ ਅਧਿਆਤਮਕ ਪੱਖਾਂ ਬਾਰੇ ਗਿਆਨ ਪ੍ਰਾਪਤ ਕਰਕੇ ਨੈਤਿਕ ਗੁਣਾਂ ਦੇ ਧਾਰਨੀ ਬਣਦੇ ਹਨ । ਗੁਰੂ ਸਾਹਿਬਾਨ ਦੁਆਰਾ ਦਰਸਾਏ ਅਧਿਆਤਮਕ ਗਿਆਨ ਦੀ ਪ੍ਰਾਪਤੀ ਦੇ ਨਾਲ-ਨਾਲ ਗੁਰਮਤਿ ਦੇ ਕਲਾ ਪੱਖਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ । ਸਿਲੇਬਸ ਦੇ ਇਸ ਭਾਗ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਮੁੱਚੀ ਮਾਨਵਤਾ ਦੀ ਬਿਹਤਰੀ ਲਈ ਚੰਗੇ ਕਾਰਜ ਕਰਨ ਦੀ ਪ੍ਰੇਰਨਾ ਮਿਲਦੀ ਹੈ । ਇਸ ਰਚਨਾ ਦੇ ਅਧਿਐਨ ਉਪਰੰਤ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਅਕਾਦਮਿਕ ਪੜ੍ਹਾਈ ਦੇ ਨਾਲ-ਨਾਲ ਜੀਵਨ ਦੇ ਅਸਲੀ ਮਨੋਰਥ ਦਾ ਗਿਆਨ ਪ੍ਰਾਪਤ ਹੁੰਦਾ ਹੈ । CO3: 'ਸੂਫੀ ਕਾਵਿ' ਦੇ ਅੰਤਰਗਤ ਵਿਦਿਆਰਥੀ ਜਿਥੇ ਮੱਧਕਾਲ ਦੇ ਸਮੇਂ ਵਿਚ ਹੋਏ ਸੂਫੀ ਕਵੀਆਂ ਦੇ ਜੀਵਨ ਬਾਰੇ ਵਿਸਥਾਰ ਵਿਚ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ ਉਥੇ ਸੂਫੀ-ਕਾਵਿ ਦੇ ਨਿਕਾਸ, ਵਿਕਾਸ ਅਤੇ ਪਤਨ ਬਾਰੇ ਵਿਸਥਾਰਪੂਰਵਕ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ । ਸੂਫੀ ਕਵੀ ਸ਼ਾਹ ਹੁਸੈਨ ਦੀ ਰਚਨਾ (ਕਾਫੀਆਂ) ਵਿਚਲੀ ਸੂਫੀ ਵਿਚਾਰਧਾਰਾ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ-ਨਾਲ ਕਾਫੀ ਸਾਹਿਤ ਰੂਪ ਦੇ ਕਲਾਤਮਕ ਪੱਖਾਂ ਬਾਰੇ ਗਿਆਨ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ । ਸੂਫੀ ਕਵੀਆਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਉਸ ਸਮੇਂ ਦੀਆਂ ਸਾਹਿਤਕ, ਰਾਜਨੀਤਿਕ, ਸਭਿਆਚਾਰਕ ਅਤੇ ਲੋਕਧਾਰਾਈ ਪ੍ਰਸਥਿਤੀਆਂ ਤੋਂ ਜ਼ਕੀਆਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਉਸ ਸਮੇਂ ਦੀਆਂ ਸਾਹਿਤਕ, ਰਾਜਨੀਤਿਕ, ਸਭਿਆਚਾਰਕ ਅਤੇ ਲੋਕਧਾਰਾਈ ਪ੍ਰਸਥਿਤੀਆਂ ਤੋਂ

ਜਾਣੂੰ ਹੁੰਦੇ ਹਨ I ਵਿਦਿਆਰਥੀ ਸੂਫੀ ਕਵੀਆਂ ਦੇ ਕਾਵਿ-ਅਨੁਭਵ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੰਦੇ ਹਨ I

CO4: ਕਿੱਸਾ ਕਾਵਿ ਦੇ ਅੰਤਰਗਤ ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲ ਦੇ ਸਮੇਂ ਕਿੱਸੇ ਦੀ ਉਤਪਤੀ, ਵਿਕਾਸ ਤੇ ਪਤਨ ਦੇ ਕਾਰਨਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I ਕਿੱਸਾ ਕਾਵਿ ਨੂੰ ਪੜ੍ਹਨ ਉਪਰੰਤ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਉਸ ਸਮੇਂ ਦੇ ਸਮਾਜ ਦੀਆਂ ਸਮਾਜਿਕ ਇਤਿਹਾਸਕ ਅਤੇ ਸਭਿਆਚਾਰਕ ਪ੍ਰਸਥਿਤੀਆਂ ਦਾ ਗਿਆਨ ਹੁੰਦਾ ਹੈ I ਹਾਸ਼ਮ ਦੇ ਕਿੱਸੇ ਸੱਸੀ ਪੁੰਨੂ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਉਸ ਸਮੇਂ ਦੇ ਸਮਾਜ ਦੀ ਸਮਾਜਿਕ ਅਤੇ ਸਭਿਆਚਾਰਕ ਤਸਵੀਰ ਨੂੰ ਡੂੰਘਾਈ ਵਿਚ ਜਾ ਕੇ ਦੇਖਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I ਕਿੱਸਿਆ ਦੇ ਕਲਾਤਮਕ ਗੁਣਾਂ ਅਤੇ ਸਭਿਆਚਾਰਕ ਮਹੱਤਤਾ ਨੂੰ ਸਮਝਦੇ ਹਨ I

Translated into English

CO1: Through the study of medieval Punjabi poetry, students can know the medieval period as well as understand the principles of mysticism, spiritualism, and Gurmatism. Along with knowing the social, economic, cultural, political, and historical conditions of that time, they are capable of learning a good life by connecting with moral values. Through the works of Gurus, Sufi poets, and storytellers, the students can understand the high and deep insight of the authors by getting information about the early literature of Punjabi.

It

is known from the thematic and artistic norms of different genres (var, shloka, Shabad, kafi, and kise, etc.) of the medieval period. Students gain insight into the philosophical background of the Middle Ages, being able to understand the conditions and various tendencies of the medieval period.

CO2: Through the study of Sri Guru Nanak Dev Ji's work

Japuji Sahib students acquire knowledge about philosophical and spiritual aspects and become possessors of moral qualities. Along with acquiring

the spiritual knowledge shown by the Gurus, they get information about the artistic aspects of Guru

		Mati. Through this section of the syllabus, the
		students get inspiration to do good work for the
		betterment of the entire humanity. After studying
		this work, students get knowledge of the real
		purpose of life along with academic studies.
		CO3: Under Sufi poetry, where the students get detailed
		information about the lives of Sufi poets in the
		medieval period, they get detailed knowledge
		about the emergence, development, and decline of
		Sufi poetry. Along with knowing the Sufi
		ideology
		in the works (Kafis) of Sufi poet Shah Hussain,
		one
		gets knowledge about the artistic aspects of Kafi's
		literary form. Through the works of Sufi poets,
		students get to know about the literary, political,
		cultural, and folkloric conditions of that time.
		Students can understand the poetic experience of
		Sufi poets.
		CO4: Under Kissa Kavi, students gain knowledge about
		the origin, development, and decline of Kissa
		during the medieval period. After reading the
		short
		story, the students know the social history, and
		cultural conditions of the society at that time.
		Through the study of Hashem's story Sassi
		Punnu, students are able to see the social and
		cultural picture of the society of that time in
		depth.
		They understand the artistic qualities and cultural
	or/ore UTI-	significance of the story.
2368	g/go u"Ek L (nkgPB I) gzikph	CO1: gzikph Bktb d/ nfXn?B Bkb ftfdnkoEh; wki dhnK T[j gosK; wMD d/
	Bktb dk nfXn?B	:'r j' iKd/ jB, fijBK pko/ T[jBK B{z
		gfjbk e'Jh frnkB BjhA j[zdk.
		CO2: gftZso gkgh, Bktb d/ gkm T[gozs
		ftfdnkoEhnK B{z ikBD dk w"ek fwfbnk
		j? fe nkofEe wzdjkbh dh jkbs ftZu
		211

		<pre>d[{finK dh wZdd eoB dh GktBk th fJ; Bktb ftZu'A g?dk j[zdh j?.</pre>
		CO3: i[r pdb frnk* Bktb okjhA ftfdnkoEhnK nzdo fJj GktBk g?dk j[zdh j? fe nkofEe wIp{ohnK ns/ b'eK d/ fsq;eko d/ pkti{d fJB;kB fwjBs d/;jko/;t?^fBoGo j';edk j?.
		CO4: g{oBwkPh Bktb okjhA ftfdnkoEhnK B{z fe;kBh ihtB, irhodkoh ;fGnkuko ftZu n"os dh dPk nkfd gZyK dk frnkB j[zdk j?.
		Translation in English
		CO1: The study of the Punjabi novel enables students
		to have understanding of the layers of the society
		of which they have no prior knowledge.
		CO2: After reading the novel Pavitar Pappi, the
		students have got an opportunity to know how to
		live life in the condition of economic depression.
		The feeling of helping others also arises from this
		novel.
		CO3: The novel Jug Badal Gaya teaches the students
		a lesson that despite economic constraints and
		humiliations a person can become self-reliant
		with the help of hard work.
		CO4: The study of novel Poornmashi provides students
		an opportunity to know about peasant life, status
		of women in feudal culture etc.
2369	Paper IV (Opt.II) pMjwbI khwxI dw AiDAYn	CO1: sMq isMG syKoN dy khwxI sMgRih 'smwcwr' dIAw khwxIAW pVHky ividAwrQIAW nMU pMjwbI dI pRgqIvwdI khwxI bwry pqw l`gdw hY[ies rwhIN ividAwrQIAW nMU pMjwbI dy ikswnI

jIvn, pMjwbI ikswnI dIAw sm`isAwvW qy pMjwbI siBAwcwr dy hor Anyk p`KW bwry jwxkwrI imldI hY[

CO2: kulvMq isMG ivrk dw khwxI sMgRih 'duAwdSI' pVHky ividAwrQI pMjwbI siBAwcwr iv`c Aw rhIAW qbdIlIAW , ienswn dIAw mno-ivigAwnk guMJlW qy dyS dI vMf dy duKWq pRqI jwxMU huMdy hn

CO3: virAwm isMG sMDU dy khwxI sMgRih 'cOQI kUt' rwhIN ividAwrQI pMjwb dy duKWqk dOr bwry jwxMU huMdy hn jdoN ienswn dw ienswn qoN Brosw ^qm ho igAw sI[ies qoN ielwvw pMjwbI in`kI khwxI dIAW rUpk qbdIlIAW bwry vI ividAwrQIAW nMUMu jwxkwrI imldI hY[

Translation in English

CO1: By reading the stories from Sant Singh Sekhon's

Collection Samachar, the students get to know about the progressive story of Punjabi. The students get information about the life of peasants, their problems and other aspects of Punjabi culture.

CO2: By reading Kulwant Singh Virak's collection
of stories Duadashi, students get to know about
the
changes that are taking place in Punjabi culture,
the psychological complexities of human beings
and the tragedy of the partition of the country.

CO3: The study of Waryam Singh Sandhu's story

Collection Chauthi Koot provides knowledge

About the tragic period of Punjab when people lost

		trust in each other. Apart from this, the students
		-
		also get information about the metaphorical
		changes of the Punjabi short story.
	·	SEMESTER-II
2372	Paper 5 AwDuink	C01: ਸੰਕ੍ਰਾਤੀ ਕਾਲ (1850-1900 ਈ: ਹੱਕ) ਮੱਧਕਾਲੀ
	pMjwbI dw	ਤੇ ਆਧੁਨਿਕ ਬੋਧ ਵਿੱਚ ਅੰਤਰ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।
	ieiqhws	
		CO2: ਸੰਕ੍ਰਾਤੀ ਕਾਲ ਦੇ ਲੱਛਣਾਂ ਬਾਰੇ ਗੱਲਬਾਤ ਕਰਦਿਆਂ ਧਾਰਮਿਕ ਤੇ ਇਸਾਈ ਮਿਯਨਰੀਆਂ ਦੀਆ ਲਹਿਰਾਂ ਦੇ ਯੋਗਦਾਨ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ। ।
		CO3: 1850 ਤੋਂ 1900 ਈ: ਤੱਕ ਰਚਿਆ ਕਿੱਸਾ-ਕਾਵਿ, ਸੂਫੀ ਕਵਿ ਵਾਰਾਂ ਤੇ ਜੰਗਨਾਮਿਆਂ ਬਾਰੇ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।
		CO4: ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਨਵ ਰਹੱਸਵਾਦੀ, ਰੁਮਾਟਿਕ ਪ੍ਰਗਤੀਵਾਦੀ, ਜੁਝਾਰਵਾਦੀ ਕਾਵਿ-ਧਾਰਾਵਾਂ ਦੇ ਹਵਾਲਿਆਂ ਨੂੰ ਸਮਝਦੇ ਹੋਏ ਇਨ੍ਹਾਂ ਪ੍ਰਸਥਿਤੀਆਂ ਨੂੰ ਸਮਝਣ ਦੀ ਕੋਸ਼ਿਸ਼ ਕਰਦੇ ਹਨ।
		CO5: ਵੀਹਵੀ ਸਦੀ ਦੀ ਗਲਪ- ਨਾਵਲ, ਕਹਾਣੀ, ਰੰਗ- ਮੰਚ, ਨਿਬੰਧ ਜੀਵਨੀ, ਸਵੈ-ਜੀਵਨੀ, ਜਫਰਨਾਮਾ ਤੇ ਰੇਖ ਚਿਤਰ ਦਾ ਇਤਿਹਾਸ ਮੂਲ ਅਧਿਐਨ ਕਰਦਿਆਂ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਇਨ੍ਹਾਂ ਵਿਧਾਵਾਂ ਨੂੰ ਪੜ੍ਹਨ ਦੀ ਰੁਚੀ ਪੈਦਾ ਹੁੰਦੀ ਹੈ।
		CO6: ਜੀਵਨੀ- ਸਵੈ ਜੀਵਨੀ ਦਾ ਫਰਕ, ਜਫਰਨਾਮਾ (ਯਾਤਰਾ ਦਾ ਹਾਲ) ਤੇ ਰੇਖਾ-ਚਿਤਰ ਪੜ੍ਹਨ ਦੀ ਰੁਚੀ ਪੈਦਾ ਹੁੰਦੀ ਹੈ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਇਨ੍ਹਾਂ ਵਿਧਾਵਾਂ ਵਿੱਚ ਅੰਤਰ ਸਮਝਣ ਦੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।
		CO7: ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜੀਵਨੀ ਤੇ ਸਵੈ- ਜੀਵਨੀ ਦਾ ਅੰਤਰ ਸਮਝਾਉਂਦਿਆਂ ਵੱਡੇ ਲੇਖਕਾਂ ਦੀਆਂ ਜੀਵਨੀਆਂ ਤੇ ਸਵੈ- ਜੀਵਨੀਆਂ ਪੜ੍ਹਨ ਲਈ ਪ੍ਰੇਰਿਤ ਕਰਦਾ ਹੈ।
		CO8: ਸੂਫੀ ਕਾਵਿ - ਬਾਬਾ ਫਰੀਦ , ਸ਼ਾਹ ਹੁਸੈਨ, ਬੁੱਲੇ ਸ਼ਾਹ ਤੇ ਗੁਲਾਮ ਫਰੀਦ ਦੇ ਅਧਿਐਨ ਨਾਲ ਗੁਰੂ ਗ੍ਰੰਥ ਸਾਹਿਬ ਦੇ ਵਿਧੀਪੂਰਵਕ ਜਾਣਕਾਰੀ ਪ੍ਰਦਾਨ ਕਰਦੇ ਹਨ।
		CO9: ਧਾਰਮਿਕ ਤੇ ਇਸਾਈ ਮਿਸ਼ਨਰੀ ਲਹਿਰਾਂ ਨਾਲ ਆਧੁਨਿਕ ਸਾਹਿਤ ਤੇ ਕੀ ਪ੍ਰਭਾਵ ਪੈਂਦਾ ਹੈ ਤੇ ਇਨ੍ਹਾਂ ਲਹਿਰਾਂ ਦੀ ਲੋੜ ਕਿਉਂ ਪਈ ? ਇਹ ਕਿਵੇਂ ਧਰਮ ਦਾ ਪ੍ਰਚਾਰ ਕਰਦੀਆਂ ਹਨ। ਵਿਦਿਆਰਥੀ ਇਹਨਾਂ ਲਹਿਰਾਂ ਨੂੰ ਸਮਝਣ ਦੇ ਯੋਗ ਬਣਦੇ ਹਨ।

CO10: ਜੰਗਨਾਮੇ ਤੇ ਵਾਰਾਂ ਜਿਹੜੇ 1850 ਤੋਂ 1900 ਈ: ਤੱਕ ਰਚੇ ਗਏ, ਸ੍ਰੀ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਦੀ ਚੰਡੀ ਦੀ ਵਾਰ ਤੇ ਹੋਰ 9 ਵਾਰਾਂ ਦਾ ਅਧਿਐਨ ਕਰਨ ਨਾਲ ਭਾਈ ਗੁਰਦਾਸ ਦੀਆਂ ਵਾਰਾਂ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।

Translation in English

CO1: It provides students information about the difference between medieval and modern philosophy of Sankranti Period to 20th century.

CO2: while discussing the characteristics of the Sankranti

period, one gains knowledge about the contribution

of religious and Christian movements.

CO3: Kissa Kav and Sufi poetry composed during 1850 to 1900 tell about battles.

CO4: Neo-mystical, romantic, progressives and aggressive poetic trends of Punjabi literature provide ample opportunity to understand the situations of that time.

CO5: By studying the history of 20th century fictionnovel, story, theater, biographies, autobiographies,

Jafarnama and Rekh Chitra, the students become interested in reading these genres.

CO6: The difference between biography and autobiography, Jafarnama (travelogue) inspire students to read the sketches. Students get to know the difference between these genres.

CO7: While explaining the difference between biography

And autobiography, history of Modern Punjabi Literature motivates students to read biographies and autobiographies of great writers.

CO8: The study of Sufi poets – Baba Farid, Shah

Hussain, Bulleh Shah and Ghulam Farid provides
students a methodical account of the Guru Granth
Sahib.

		CO9: What was the effect of religious and Christian
		Missionary movements on modern literature and
		what was the need of these movements? How did
		they propagate religion? Students get to know about
		these movements.
		CO10: The study of Janganamas and Vars which were
		composed from 1850 to 1900 AD and Sri Guru
		Gobind Singh's Chandi Di Var and other 9 Vars,
		enable one to understand the Vars of Bhai Gurdas.
2373	pypr CyvW-	CO1: AwDuink p`CmI kwiv-Swsgr dw
	AwDuink p`CmI	AiDAYn krdy hoey ividAwrQIAW nMU rUsI
	kwiv-Swsqr Aqy	rUpvwd dy mUl sMklpW dI jwxkwrI imldI hY[nv-AmrIkI skUl dy mUl sMklpW dI
	ivhwrk Awlocnw	<pre>jwxkwrI vI imldI hY[auprokq swihq dw AiDAYmn krky ividAwrQIAW nMu pMjwbI swihq nwl auprokq dw imlwx krn dI sUJ imldI hY[</pre>
		CO2: sMrcnwvwd Aqy auqr-sMrcnwvwd rwhIN swihq dIAW v`K-v`K DwrwvW bwry ividAwrQIAW nMu jwxkwrI imldI hY[
		CO3: mwrksvwdI swihq isDWq rwhIN ividAwrQIAW nMu mwrksvwdI swihq dIAW v`K-v`K pRvIrqIAW dI jwxkwrI imldI hY[mwrksvwdI swihq dI ivcwrDwrw, vsqU Aqy rUp, pRqIb`Dqw Aqy nv-mwrksvwd bwry jwxkwrI ividAwrQIAW dIAw swihqk rucIAw nMU cMf krn dw kMm krdI hY[
	Modern Western Poetics and Practical Criticism	CO4: ivhwrk Awlocnw rwhIN ividAwrQIAw iv`c swihq nMU smJx Aqy ausdI audwrqqw nMU Awpxyy ihrdy iv`c smwaux dI pRblqw BwrU huMdI hY[
	G114443311	Translated into English
		CO1: Students are introduced to the basic concepts of
		Russian formalism while studying modern
		Western poetics. Basic concepts of the neo-
		American school are also covered. By studying
		the
		above literature, the students get the insight to

		combine the above with Punjabi literature.
		CO2: Students get information about various streams of
		literature through structuralism and post-
		structuralism.
		CO3: Through Marxist literary theory, students get
		information about various tendencies of Marxist
		literature. Information about the ideology, object
		and form, commitment, and, neo-Marxism of
		Marxist literature serves to stimulate the literary
		interests of the students.
		CO4: Emphasis is placed on understanding literature
		through practical criticism and imbibing its
		generosity in one's heart.
2374	Paper 7 Opt 1 ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ-II	CO1: ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲ ਦੇ ਸਮੇਂ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ ਰਹੱਸਵਾਦ, ਅਧਿਆਤਮਵਾਦ ਅਤੇ ਗੁਰਮਤਿ ਦੇ ਸਿਧਾਤਾਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ l ਵਿਦਿਆਰਥੀ ਬਿਰਤਾਂਤਕ ਕਵਿਤਾ ਦੇ ਗੁਣਾਂ, ਲੱਛਣਾਂ, ਅਤੇ ਪਵਿਰਤੀਆਂ ਤੋਂ ਜਾਣੂੰ ਹੁੰਦੇ ਹਨ l
		CO2: ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ ਦੀ ਰਚਨਾਂ ਸੁਖਮਨੀ ਸਾਹਿਬ ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਦਾਰਸ਼ਨਿਕ ਅਤੇ ਅਧਿਆਤਮਕ ਪੱਖਾਂ ਬਾਰੇ ਗਿਆਨ ਪ੍ਰਾਪਤ ਕਰਕੇ ਨੈਤਿਕ ਗੁਣਾਂ ਦੇ ਧਾਰਨੀ ਬਣਦੇ ਹਨ I ਇਹ ਰਚਨਾ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਮੁੱਚੀ ਮਾਨਵਤਾ ਦੀ ਬਿਹਤਰੀ ਲਈ ਚੰਗੇ ਕਾਰਜ ਦੀ ਪ੍ਰੇਰਨਾ ਦਿੰਦੀ ਹੈ I ਵਿਦਿਆਰਥੀ ਅਕਾਦਮਿਕ ਪੜ੍ਹਾਈ ਦੇ ਨਾਲ-ਨਾਲ ਜੀਵਨ ਦੇ ਅਸਲੀ ਮਨੋਰਥ ਦਾ ਗਿਆਨ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ I
		CO3: ਸੂਫੀ ਕਾਵਿ ਦੇ ਅੰਤਰਗਤ ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲੀ ਦੇ ਸਮੇਂ ਵਿਚ ਹੋਏ ਸੂਫੀ ਕਵੀਆਂ ਦੇ ਜੀਵਨ ਬਾਰੇ ਵਿਸਥਾਰ ਵਿਚ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਦੇ ਹਨ I ਸੂਫੀ ਕਾਵਿ ਦੇ ਨਿਕਾਸ, ਵਿਕਾਸ ਅਤੇ ਪਤਨ ਦੇ ਕਾਰਨਾਂ ਬਾਰੇ ਸੂਝ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹਨ I ਸੂਫੀ ਕਵੀ ਬੁੱਲ੍ਹੇ ਸ਼ਾਹ ਦੀ ਰਚਨਾ (ਕਫੀਆਂ) ਵਿਚਲੀ ਵਿਚਾਰਧਾਰਾ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ ਕਾਫੀ ਕਾਵਿ-ਰੂਪ ਦੇ ਕਲਾਤਮਕ ਪੱਖਾਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I ਕਾਵਿ-ਰੂਪ ਕਾਫੀਆਂ ਰਾਹੀਂ ਉਸ ਸਮੇਂ ਦੇ ਸਮਾਜ ਦੀਆਂ ਸਮਾਜਿਕ ਦੀਆਂ ਸਮਾਜਿਕ, ਸਾਹਿਤਕ, ਰਾਜਨੀਤਿਕ, ਸਭਿਆਚਾਰਾਕ ਅਤੇ ਲੋਕਧਾਰਾਈ ਪ੍ਰਸਥਿਤੀਆਂ ਦਾ ਪਤਾ ਚਲਦਾ ਹੈ I
		CO4: ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਦੀ ਰਚਨਾ 'ਚੰਡੀ ਦੀ ਵਾਰ' ਦੇ ਅਧਿਐਨ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀ ਕਾਵਿ-ਰੂਪ ਵਾਰ ਦੇ ਸਿਧਾਂਤਾਂ ਪਹਿਲੂਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕਰਦੇ ਹੋਏ ਵਾਰ ਦੇ ਗੁਣਾਂ ਅਤੇ ਮਹੱਤਤਾ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I ਸਾਹਿਤ ਦੇ ਇਸ ਕਾਵਿ ਰੂਪ ਦੁਆਰਾ ਵਿਦਿਆਰਥੀਆਂ ਜਬਰ-ਜੁਲਮ ਅਤੇ ਅਨਿਆਂ ਦੇ ਵਿਰੁੱਧ ਡਟੇ ਰਹਿਣ ਦੀ ਪ੍ਰੇਰਨਾ ਪ੍ਰਾਪਤ ਕਰਦੇ

ਹਨ I

Translated into English

CO1: Through the study of medieval Punjabi poetry students are able to understand the principles of mysticism, spiritualism, and Gurmatism along with knowing the medieval period. Students learn about the characteristics, features, and trends of narrative poetry.

CO2: Through the study of Sukhmani Sahib, the works of Guru Arjan Dev ji, the students acquire knowledge about the philosophical and spiritual aspects and become possessors of moral qualities.

This work inspires the students to do good work for

the betterment of the entire humanity. Along with academic studies, students gain knowledge about the real purpose of life.

CO3: In the course of Sufi poetry, students learn in detail

about the lives of Sufi poets in the medieval period.

Sufis gain insight into the causes of the emergence,

growth, and decline of poetry. Sufi poets are capable of understanding the artistic aspects of the poetic form along with knowing the ideology in Bulleh Shah's work (Kafis). The social, literary, political, cultural, and folkloric conditions of the society of that time are revealed through poetic forms.

CO4: Through the study of Guru Gobind Singh Ji's work

Chandi Di War students are able to understand the

qualities and importance of War while getting information about the principles and aspects of poetic form War. Through this poetic form of

		literature, students get inspiration to stand
		against oppression and injustice.
2376	g/go nZmtK opt 1L gzikph Bktb dk nfXn?B	CO1: 'nZX ukBDh oks' Bktb gzikph fe;kBh ihtB nzdo bVkJh^MrfVnK pko/ikDekoh fdzdk j? ns/ ftfdnkoEhnK B{z bVkJh^MrfVnK s'A d{o ofjD dh gq/oBk fwbdh j?.
		CO2: oks d/ okjh Bktb gzikph fe;kBh ihtB dh nkofEe wzdjkbh pko/ ikDekoh fdzdk j? ns/ ftfdnkoEhnK B{z ;/X fwbdh j? fe i/eo y/shpkVh okjh rIkok BjhA j[zdk j? sK fJ; ftZu'A fBebe/e'Jh j'o ezw ngDkn b?Dk ukjhdk j?.
		CO3: e"ot ;Gk Bktb ;zgsh ekoB gfotkoe eb/P dh rZb dZ;dk j? ns/ ftfdnkoEhnK B{z ;/X fwbdh j? fe gfotkoe MrV/fJB;kB bJh pj[s ysoBke f;ZX j[zd/ jB.
		Translated into English
		CO1: The novel Ladh Channi Raat' gives information
		about the conflicts in Punjabi peasant life and
		inspires the students to stay away from the conflicts.
		CO2: The novel through the night gives information
		about the economic decline of Punjabi peasant life
		and the students get guidance that if agriculture
		does not earn a living then they should take up
		some other work out of it.
		CO3:The novel Kaurava Sabha tells the story of family
		conflict due to wealth and the students get
		guidance that family conflicts prove to be very
		dangerous for a person.
2377	Paper VIII (Opt.II) pMjwbI khwxI dw AiDAYn	CO1: sMqoK isMG DIr dy khwxI sMgRih myrIAw SRySt khwxIAW rwhIN ividAwrQI inmn vrg dIAW sm`isAwvW qoN jwxMU huMdy hn[
		CO2: pRym pRkwS dy khwxI sMgRih 'mukqI' rwhIN ividAwrQI ienswn dIAW mno ivigAwnk sm`isAwvW qoN jwxMU huMdy hn[

		CO3: jrnYl isMG dy khwxI sMgRih 'twvrz' rwhIN ividAwrQI pRvwsI jIvn dI bhu-p`KI pwswrW bwry jwxMU huMdy hn[Translated into English CO1: From Santokh Singh Dhir's Story Collection My Best Stories Students learn about the problems of the lower classes. CO2: Through Prem Prakash's story collection 'Mukti', students get to know the psychological problems of human beings. CO3: Through Jarnail Singh's story collection 'Towers', students get to know about the multifaceted aspects of migrant life.
	S	SEMESTER-III
2380	g/go B"tk L GkPk nfXn?B ns/ gzikph GkPk	CO1: ftfdnkoEh GkPk d/ f; XKse gfjb{nK pko/ ikDekoh jk; b eo b?Adk j?. CO2: ftfdnkoEhnK B{z gzikph GkPk, fJ; dhnK X[BhnK, ftnesh dh GkPkJh; woZEk nkfd dk pj[^gZyh frnkB j' iKdk j?. CO3: GkPk ftfrnkB eh j?, GkPk dk ftek; s/ fJ; ftZu spdhbhnK fet/A j[zdhnK jB, fJ; pko/ ikDekoh ftfdnkoEhnK B{z fwbdh j?. Translation in English CO1: The student acquires knowledge about the theoretical aspects of the language. CO2: Students get multifaceted knowledge of Punjabi language, its sounds and linguistic ability of a person etc. CO3: Students get information about what is linguistics is, the development of language and how does the changes take place in it.
2381	pypr - dsvW	CO1: ਸਾੱਭਿਆਚਾਰ ਅਤੇ ਲੋਕਧਾਰਾ ਅਤੇ ਪੰਜਾਬੀ ਸਾੱਭਿਆਚਾਰ

s`iBAwcwr, lokDwrw qy pMjwbI s`iBAwcwr ਦਾ ਅਧਿਐਨ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਰੋਜਾਨਾ ਜੀਵਨ ਦੇ ਸੰਧਰਭ ਅਤੇ ਸੱਭਿਆਚਾਰ, ਰੀਤੀ ਰਿਵਾਜ਼ ਨੂੰ ਸਮਝਣ ਦੇ ਯੋਗ ਬਣਾਉਦੇ ਹਨ।

CO2: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸੱਭਿਆਚਾਰ ਦੀ ਪ੍ਰਕਿਰਤੀ ਤੇ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਅਤੇ ਸੱਭਿਆਚਾਰਕ ਪਰਿਵਰਤਨ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹਨ।

CO3: ਲੋਕਧਾਰਾ ਦੀ ਪ੍ਰਕਿਰਤੀ ਤੇ ਵਿਸ਼ੇਸ਼ਤਾਵਾ ਲੋਕ-ਮਨ, ਲੋਕ ਰੂੜੀਆਂ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਖੁੱਲੀ ਗੱਲਬਾਤ ਕਰਕੇ ਪ੍ਰੈਕਟੀਕਲੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।

CO4: ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਪੁਰਾਤਨ ਤੇ ਆਧੁਨਿਕ ਬਾਰੇ ਤੁਲਨਾਤਮਕ ਜਾਣਕਾਰੀ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਦਿੰਦੇ ਹੋਏ ਵਿਸ਼ਵੀਕਰਨ ਦਾ ਵਰਤਾਰਾ, ਬਦਲਾਅ ਤੇ ਕਵੀਆਂ ਵੰਗਾਰ ਜੋ ਸੱਭਿਆਚਾਰ ਵਿੱਚ ਆ ਰਹੀਆਂ ਹਨ ਨੂੰ ਸਮਝਣ ਦਾ ਮੌਕਾ ਮਿਲਦਾ ਹੈ।

CO5: ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦੀ ਬਣਤਰ, ਰਿਸ਼ਤੇ ਨਾਤੇ ਪ੍ਰੰਪਰਿਕ ਪਿੰਡ ਅਤੇ ਇਨਾਂ ਦੀਆਂ ਪ੍ਰਮੁੱਖ ਸੰਸਥਾਵਾਂ ਬਾਰੇ ਜਾਣੂ ਕਰਵਾਉਦਿਆ, ਬਜੁਰਗਾਂ ਤੋਂ ਅਨੇਕਾ ਪ੍ਰਕਾਰ ਦੀ ਜਾਣਕਾਰੀ ਮਿਲਦੀ ਹੈ।

CO6: ਪੰਜਾਬ ਦੀਆਂ ਰੀਤਾ, ਮੇਲੇ ਤਿਉਹਾਰ ਲੋਕ ਨਾਚ ਤੇ ਲੋਕ ਨਾਟ ਬਾਰੇ ਖੁੱਲ੍ਹੀ ਗੱਲਬਾਤ ਰਾਹੀ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਮੇਲੇ ਤੇ ਤਿਉਹਾਰ ਦਿਖਾਉਂਦੇ ਹੋਏ, ਲੋਕ ਮਨ ਪ੍ਰਚਾਵੇ ਦੀ ਵਿਧੀ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਂਝ ਪੁਆਈ ਤੇ ਨਵੀਆਂ ਚੀਜਾ ਸਿੱਖਣ ਦੀ ਲਾਲਸਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ।

C07: ਪੰਜਾਬੀ ਲੋਕਧਾਰਾ ਦੀਆਂ ਵਿਧਾਵਾ ਦੀ ਵਰਗਵੰਡ ਜਿਵੇਂ ਲੋਕ ਵਿਸ਼ਵਾਸ਼ ਸਿਆਣਪਾ, ਪੰਜਾਬੀ ਰੀਤਾ ਤੇ ਰਸਮ (ਜਨਮ-ਵਿਆਹ ਤੇ ਮੌਤ) ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨਾਲ ਸਾਂਝ ਪਉਣੀ ਤੇ ਉਨਾਂ ਦੇ ਸਮਾਜਿਕ ਜੀਵਨ ਦੇ ਸੰਦਰਭ ਵਿੱਚ ਰੱਖਦੇ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ

CO8: ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦਾ ਅਧਿਐਨ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਆਧੁਨਿਕ ਤੇ ਪੁਰਾਤਨ ਪਿੰਡਾਂ ਦੇ ਮਨ ਪ੍ਰਚਾਵੇ ਦੇ ਫਰਕ, ਰੋਟੀ ਬੇਟੀ ਦੀ ਸਾਂਝ ਤੇ ਰਿਸਤੇ ਨਾਤਿਆਂ ਦੀ ਮਹੱਤਤਾ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਬਣਾਉਦਾ ਹੈ।

Translation in English

CO1: The study of culture, folklore and Punjabi culture enables students to understand the context of daily life, the culture, customs and traditions.

CO2: Students gain knowledge about the nature and characteristics of culture and cultural change.

CO3: By giving information to the students about the nature of folklore and characteristic folk-mind, folk customs, practical information is obtained through open conversation.

		CO4: While providing comparative information about ancient and modern Punjabi culture, it gives the students an opportunity to understand the phenomenon of globalization, and the changes and the downfall which are taking place in the culture. CO5: It provides information about the structure of Punjabi culture, the traditional villages, relationships and other major institutions. The elder and older persons are the source of great knowledge. CO6: The customs, fairs, festivals and folk dances of Punjab encourage students to know about the methods and ways by which people used to entertain themselves and generate interest to learn new things about it. CO7: The genres of Punjabi folklore like folk beliefs, customs and rituals related to birth, marriage and death provide students the information about their social life. CO8: The study of Punjabi culture enables the students to comprehend the forms of entertainment of modern and ancient villages, the importance of bread-butter relationship and human
		relationships.
2382	prew igAwrvW- AwDuink pMjwbI kivqw-1	CO1: AwDuink pMjwbI kivqw dw AiDAYn ividAwrQIAW leI bhuq hI zrUrI hY[ies kivqw dy AiDAYn rwhIN hI smwj iv`c c`l rhIAW pRivrqIAW dw AiDAYn huMdw hY[smwj dI smJ ividAwrQIAW nMU AwDuink pMjwbI kivqw dw AiDAYn krky hI AwauNdI hY[CO2: pRo. pUrn isMG dI pusqk'KulHy mYdwn" dy AiDAYn rwhIN ividAwrQIAW nMU ij`Qy Ku`lI kivqw bwry jwxkwrI imldI hY auQy SYlI dI qwkq dw vI igAwn huMdw hY[SYlI rwhIN AwpxI BwSw nMu ikvyN pRBwvSwlI bxwauxw hY, iesdw igAwn vI huMdw hY[

	CO3: pRo. mohn isMG dI pusqk 'myrI cOxvI kivqw' dy AiDAYn rwhIN ividAwrQIAW nMu ivSy Aqy klwqmkqw dw BrpUr igAwn pRwpq huMdw hY[pRo. mohn isMG dI pRgqvIvwdI pRivrqI rwhIN mwrksvwd dw igAwn ividAwrQIAW dIAw swihqk rucIAW nMu pRcMf krdw hY[
Modern Punjabi Poetry-1	CO4: bwvw blvMq dI puqsk 'sugMD smIr' aunHW swry q`qW nwl BrpUr hY ijhVy iksy kivqw dI audwqqw leI zrurI hn[ies kivqw dy AiDAYn rwhIN ividAwrQIAw nMu sMswr-Amn, AMqr-rwStrI cyqnw, AwSwvwd Aqy hor pRgqISIl iviSAW bwry igAwn hwsl huMdw hY[
	Translated into English
	CO1: Study of modern Punjabi poetry is very important
	for students. It is only through the study of this
	poem that the trends going on in the society are
	studied. Students can understand the society only
	by studying modern Punjabi poetry.
	CO2: Prof. Through the study of Puran Singh's book
	'Khulhe Maidan', the students get information
	about open poetry and also know the power of the
	style. There is also the knowledge of how to make
	your language effective through style.
	CO3: Prof. Through the study of Mohan Singh's book
	'Meri Chaunvi Kavita', students get rich
	knowledge of the subject and artistry. Prof. The
	knowledge of Marxism through the progressive
	tendency of Mohan Singh enhances the literary
	interests of the students.
	CO4: Bawa Balwant's book 'Sugandh Sameer' is full of
	all the elements that are necessary for the sublime
	of a poem. Through the study of this poem,
	students gain knowledge about world peace,

		international consciousness, optimism, and, other
		progressive topics.
2384	Paper 12 Opt 1 ਪੰਜਾਬੀ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ ਦਾ ਅਧਿਐਨ-1	CO1: ਵਿਦਿਆਰਥੀ ਸਾਹਿਤਕ ਵਿਧਾ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ ਦੇ ਸਿਧਾਂਤਕ ਪਹਿਲੂਆਂ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ-ਨਾਲ ਨਾਟਕ ਦੀ ਉਤਪਤੀ/ਨਿਕਾਸ, ਵਿਕਾਸ ਅਤੇ ਵੱਖ-ਵੱਖ ਪ੍ਰਵਿਰਤੀਆਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I
		CO2: ਪੰਜਾਬੀ ਨਾਟਕਕਾਰਾਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਦੁਆਰਾ ਸਮਾਜ ਦੀਆਂ ਸਮਾਜਿਕ, ਸਭਿਆਚਾਰਕ, ਰਾਜਨੀਤਿਕ ਅਤੇ ਆਰਥਿਕ ਪ੍ਰਸਥਿਤੀਆਂ ਨੂੰ ਸਮਝ ਕੇ ਲੋੜ ਪੈਣ 'ਤੇ ਇਨ੍ਹਾਂ ਵਿਚ ਬਦਲਾਵ ਲਿਆਉਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।
		CO3: ਵਿਦਿਆਰਥੀ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ ਦੇ ਆਪਸੀ ਸੰਬੰਧਾਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I
		CO4: ਨਾਟਕ ਪੜ੍ਹਨ ਉਪਰੰਤ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਆਪਸੀ ਵਾਰਤਾਲਾਪ ਦੀ ਰੁਚੀ ਪੈਦਾ ਹੁੰਦੀ ਹੈ I ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਰਚਨਾਤਮਕ ਹੁਨਰ ਦਾ ਸੰਚਾਰ ਹੁੰਦਾ ਹੈ I
		CO5: ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸਮੂਹਿਕ ਰੂਪ ਵਿਚ ਕਾਰਜ ਕਰਨ ਦੀ ਭਾਵਨਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ I
		CO6: ਵਿਦਿਆਰਥੀਆਂ ਨਾਟਕ ਅਤੇ ਇਕਾਂਗੀ ਵਿਚਲੇ ਅੰਤਰ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I
		CO7: ਨਾਟਕ ਦੇ ਅਧਿਐਨ ਰਾਹੀ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਮੰਚ ਉੱਪਰ ਬੋਲਣ ਅਤੇ ਕੰਮ ਕਰਨ ਦੀ ਸਮਰੱਥਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ I ਇਸ ਨਾਲ ਜਿਥੇ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਹੁਨਰ ਵਿਚ ਨਿਖਾਰ ਆਉਂਦਾ ਹੈ ਉਥੇ ਰੋਜ਼ਗਾਰ ਦੇ ਮੌਕੇ ਵੀ ਪ੍ਰਾਪਤ ਹੁੰਦੇ ਹਨ I
		Translated into English
		CO1: Students will be able to understand the theoretical
		aspects of literary genre drama and theatre, as well
		as understand the origin/outgrowth, development,
		and various trends of drama.
		CO2: By understanding the social, cultural, political and
		economic conditions of the society through the
		works of Punjabi dramatists, they are capable of
		bringing changes in them if necessary. CO3: Students are able to understand the
		interrelationship between drama and theatre.
		CO4: After reading the play, an interest in mutual
		dialogue arises among the students. Creative skills
		are imparted to the students

		CO5: Students develop a sense of teamwork.
		CO6: Students are able to understand the difference
		between drama and solitude.
		CO7: Students develop the ability to speak and act on
		stage through the study of drama. With this, where
		the skills of the students improve, they also get
		employment opportunities.
		SEMESTER-IV
2388	g/go 13 L GkPk ftfrnkB, gzikph GkPk ns/	CO1: ftfdnkoEhnK B{z gzikph ftnkeoD dh Gog{o ikDekoh fwbdh j?.
	r[ow[Zyh fbZgh	CO2: gzikph GkPk d/ iBw s/ ftek; pko/ ftfdnkoEh ikDekoh jk;b eod/ jB.
		CO3: GkPk d/ fJfsjk; Aqy Gkos ftZu; w/A^; w/A p'bhnK iKdhnK ojhnK GkPktK pko/ Gog{o ikDekoh ftfdnkoEh B{z fwbdh j?.
		CO4: ftfdnkoEhnK B{z P[X gzikph fbyD dh ebk ftZu w[jkos jk;b j[zdh j?.
		CO5: r[ow[Zyh fbgh pko/ ftfdnkoEh ikDekoh jk;b eod/ jB.
		Translation in English
		CO1: Students obtain rich knowledge of Punjabi
		grammar.
		CO2: Students gain knowledge about the birth and
		development of Punjabi language.
		CO3: The students get ample information about the
		history of the language and the languages spoken
		in India from time to time.
		CO4: Students gain mastery in the art of correct writing
		in Punjabi.
		CO5: Students learn about Gurmukhi script.
2389	Paper 14 ਪੰਜਾਬੀ ਲੋਕਧਾਰਾ ਤੇ ਸੱਭਿਆਚਾਰ	CO1: ਲੋਕ ਸਾਹਿਤ ਦੀ ਪ੍ਰਕ੍ਰਿਤੀ-ਸੁਹਾਗ, ਘੋੜੀ, ਸਿੱਠਵੀ, ਹੇਅਰ, ਟੱਪਾ, ਲੰਮੀ ਬੋਲੀ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨਾਲ ਸਾਂਝ ਪਾਉਣੀ।
		ਕੀਰਨਾ, ਅਖਾਣ, ਮੁਹਾਵਰਾ-ਕਦੇ ਤੇ ਕਿੱਥੇ ਤੇ ਕਿਵੇਂ

ਵਰਤਿਆ ਜਾਣਾ ਹੈ । ਕੀਰਨੇ ਕਿਵੇ ਤੇ ਕਿਹੜੇ ਇਲਾਕੇ ਵਿੱਚ ਪਾਏ ਜਾਦੇ ਹਨ। ਇਨ੍ਹਾਂ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜਾਣਕਾਰੀ ਦੇਣੀ।

CO2: ਬੁਝਾਰਤਾਂ, ਸਿੱਖ ਕਥਾਵਾਂ, ਦੰਤ ਕਥਾਵਾਂ, ਲੋਕ-ਕਹਾਣੀ ਪਰੀ ਕਥਾਵਾਂ, ਨੀਤੀ ਕਥਾਵਾਂ ਦੀ ਰੋਜ਼ਾਨਾ ਜਿੰਦਗੀ ਵਿੱਚ ਮਹੱਤਤਾ ਦੱਸਦੇ ਹੋਏ, ਪੁਰਾਤਨ ਸਮੇ ਵਿੱਚ ਇਹ ਕਥਾਵਾਂ ਮਨ ਪ੍ਰਚਾਵੇ ਦਾ ਪ੍ਰਮੁੱਖ ਸਾਧਨ ਸਨ।

CO3:ਪੰਜਾਬੀ ਲੋਕ ਕਥਾ ਰੂਪਾਂ ਦੀ ਵਰਗਵੰਡ-ਪੰਜਾਬੀ ਲੋਕ-ਬਿਰਤਾਤ, ਲੋਕ ਰੂੜੀਆਂ ਤੇ ਲੋਕ-ਬਿਰਤਾਤ ਬਾਰੇ ਅਧਿਐਨ ਕਰਦਿਆ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮੱਰਥ ਬਣਨ ਦੀ ਲਗਨ ਪੈਦਾ ਹੁੰਦੀ ਹੈ।

CO4: ਪੰਜਾਬੀ ਲੋਕ-ਕਾਵਿ ਵਿਚ ਔਰਤ ਦੀ ਸਥਿਤੀ, ਲੋਕ ਕਾਵਿ ਦੇ ਪ੍ਰਮੁੱਖ ਵਿਸ਼ੇ (ਰੱਬ, ਮੌਤ, ਇਸ਼ਕ, ਪੇਕਾ ਤੇ ਸਹੁਰਾ ਪਰਿਵਾਰ) ਨੂੰ ਮੌਜੂਦਾ ਜਿੰਦਗੀ ਦੇ ਸੰਦਰਭ ਵਿੱਚ ਰੱਖ ਕੇ ਪੇਸ਼ ਕੀਤੀ ਹੈ ਵਿਦਿਆਰਥੀ ਇਨਾਂ, ਵਿਸ਼ਿਆਂ ਨਾਲ ਜੁੜਕੇ ਉਸ ਸਮੇ ਦੇ ਸਮਾਜ ਦੀ ਸਮਾਜਿਕ ਅਤੇ ਸੱਭਿਆਚਾਰਕ ਤਸਵੀਰ ਨੂੰ ਡੂੰਘਾਈ ਵਿੱਚ ਜਾ ਕੇ ਵੇਖਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।

CO5: ਪੰਜਾਬੀ ਲੋਕਧਾਰਾ, ਭਾਸ਼ਾ ਤੇ ਸੱਭਿਆਚਾਰ, ਸੱਭਿਆਚਾਰਕ ਪਰਿਵਰਤਨ ਅਤੇ ਲੋਕ ਸਾਹਿਤ ਦਾ ਅਧਿਐਨ ਵਿਦਿਆਰਥੀ ਨੂੰ ਅਕਾਦਮਿਕ ਪੜ੍ਹਾਈ ਦੇ ਨਾਲ-ਨਾਲ ਜੀਵਨ ਦੇ ਅਸਲੀ ਮਨੋਰਥ ਨੂੰ ਸਮਝਣ ਦੇ ਕਾਬਿਲ ਬਣਾਉਂਦਾ ਹੈ।

CO6: ਪੰਜਾਬੀ ਲੋਕ ਕਾਵਿ ਵਿਚ ਔਰਤ ਦੀ ਸਥਿਤੀ ਪੁਰਾਤਨ ਤੇ ਆਧੁਨਿਕ ਸਧੰਰਭ ਵਿੱਚ ਸਮਝਣ ਦਾ ਮੌਕਾ ਮਿਲਦਾ ਹੈ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸੱਭਿਆਚਾਰ ਪ੍ਰਤੀ ਜਾਗਰੁਕਤਾ ਤੇ ਸਮਾਜਿਕ ਸੁਧਾਰਾਂ ਨੂੰ ਪ੍ਰੈਕਟੀਕਲੀ ਸਾਹਮਣੇ ਲਿਆਉਣ ਦੀ ਉਤਸੁਕਤਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ।

CO7: ਅਖਾਣ ਤੇ ਮੁਹਾਵਰੇ ਵਿੱਚ ਫਰਕ , ਕੀਰਨੇ ਤੇ ਲੋਕ ਗੀਤਾਂ ਦੀ ਲੈਅ ਦੀ ਸਾਂਝ, ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸੱਭਿਆਚਾਰ ਪ੍ਰਤੀ ਡੂੰਘਾਈ ਨਾਲ ਅਧਿਐਨ ਕਰਨ ਦੀ ਲਗਨ ਪੈਦਾ ਕਰਦਾ ਹੈ।

CO8:ਮਨੁੱਖ ਰਿਸ਼ਤਿਆਂ ਅੰਦਰ ਜਨਮ ਲੈਂਦਾ ਹੈ ਤੇ ਇਨ੍ਹਾਂ ਰਿਸ਼ਤਿਆਂ ਨੂੰ ਨਿਭਾਉਂਦਿਆਂ ਇਸ ਸੰਸਾਰ ਤੋਂ ਅਲਵਿਦਾ ਲੈ ਲੈਂਦਾ ਹੈ। ਰਿਸ਼ਤਿਆਂ ਅੰਦਰ ਪਿਆਰ ਤੇ ਮੋਹ ਬਰਕਰਾਰ ਰੱਖਣ ਲਈ ਸਹਿਣਸੀਲਤਾ ਦੀ ਲੋੜ ਪ੍ਰਤੀ ਜਾਗਰੁਕਤਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ।

CO9: ਭਾਸ਼ਾ ਤੇ ਸੱਭਿਆਚਾਰ, ਸੱਭਿਆਚਾਰਕ ਪਰਿਵਰਤਨ ਅਤੇ ਲੋਕ ਸਹਿਤ ਦਾ ਅਧਿਐਨ ਕਰਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਜ਼ਿੰਦਗੀ ਜਿਉਣ ਤੇ ਨਿਭਾਉਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।

	Translation in English
	CO1: The students come to know about the nature of
	folk literature through the following genres:
	Suhag, Ghodi, Sitthavi, Hair, Tappa, Lambi boli.
	CO2: When, where and how to use Kirna, Akhan,
	Muhavara (Idioms)? How and in which region the
	custom of Kirna is in vogue? The students are
	informed about them.
	CO3: While explaining the importance of Riddles, Sikh
	stories, mythology, folktales, fairy tales, and
	innovative tales in daily life, students are
	informed that these stories were the main means
	of entertainment in ancient times.
	CO4: The study of Punjabi folklore forms- traditions,
	rituals, customs and folktales enable the students
	to develop understanding of the Punjabi culture.
	CO5: The position of women in Punjabi folk poetry and
	the major themes of folk poetry (God, death, love,
	parentage and in-law family) have been
	presented in the context of current life so that
	students become able to look deeper into the
	cultural and social picture of that time.
	CO6: The study of Punjabi folklore, language and
	culture, cultural change and folk literature enables
	the student to understand the true purpose
	of life along with academic studies.
	CO7: Punjabi folk poetry provides an opportunity to
	analyze the position of women in ancient and
	modern contexts. It creates the awareness for
	culture and infuses curiosity among students to
	bring practicable social reforms.
	CO8: The difference between Akhan and Muhabara
	(idiom) and the similarity of the rhythm of kirane
	and folk songs instill in the student a desire to
	study the culture in depth.
	CO9: Man takes birth in relationships and leaves this
<u> </u>	

		world fulfilling these relationships. This creates
		an awareness of the need for tolerance to
		maintain love and affection in relationships.
		CO10: The study of language and culture, cultural
		change and folk-literature prepares students to
		live life and perform duties.
2391	pypr pMdrvW-	CO1: fw. jgqwr dI pusqk 'pRvys duAwr'
	AwDuink pMjwbI	dw AiDAYn krdy hoey ividAwrQIAW nMU
	kivqw-II	kivqw rcn dIAw jugqW dw igAwn huMdw hY[
		CO2: pws dI pusqk 'swfy simAW iv`c' dw AiDAYn krdy hoey ividAwrQIAW nMU jIvn AnuBv pRwpq huMdw hY Aqy smyN smyN c`lIAW kRWqIkwrI lihrW dw igAwn pRwpq hUMdw hY[
	Modern Punjabi	CO3: surjIq pwqr dI pusqk 'hnyry iv`c sulgdI vrxmwlw' iv`c mnu`KI hoNd dI pCwx dy msly nMU pRmu`Kqw nwl pRgtwieAw igAw hY[ividAwrQIAW nMu ies pusqk dy AiDAYn rwhIN smwj iv`c AwpxI pCwx bxwaux leI SMGrSSIl hox dI pRyrnw imldI hY[
	Poetry-II	Translated into English
		CO1: Dr. While studying Jaguar's book 'Praves Dwar',
		students get to know the tricks of poetry
		composition.
		CO2: By studying the Chhau-02 passbook 'Sade
		Samyaan Mein', the students get life experience
		and gain knowledge about the revolutionary
		movements that took place from time to time.
		CO3: In Surjit Patar's book 'Henere Mein Sulgadi
		Vranmala', the issue of the identity of human
		existence is prominently expressed. Through the
		study of this book, the students are inspired to be
		brave to make their identity in society.
2392	Paper 16 Opt. 1 ਪੰਜਾਬੀ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ ਦਾ	CO1: ਵਿਦਿਆਰਥੀ ਸਾਹਿਤਕ ਵਿਧਾ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ ਦੇ ਸਿਧਾਂਤਕ ਪਹਿਲੂਆਂ ਨੂੰ ਜਾਣਨ ਦੇ ਨਾਲ-ਨਾਲ ਨਾਟਕ ਦੀ ਉਤਪਤੀ/ਨਿਕਾਸ, ਵਿਕਾਸ

ਅਧਿਐਨ	ਅਤੇ ਵੱਖ-ਵੱਖ ਪ੍ਰਵਿਰਤੀਆਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I
	CO2: ਪੰਜਾਬੀ ਨਾਟਕਕਾਰਾਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਦੁਆਰਾ ਸਮਾਜ ਦੀਆਂ ਸਮਾਜਿਕ, ਸਭਿਆਚਾਰਕ, ਰਾਜਨੀਤਿਕ ਅਤੇ ਆਰਥਿਕ ਪ੍ਰਸਥਿਤੀਆਂ ਨੂੰ ਸਮਝ ਕੇ ਲੋੜ ਪੈਣ 'ਤੇ ਇਨ੍ਹਾਂ ਵਿਚ ਬਦਲਾਵ ਲਿਆਉਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ।
	CO3: ਵਿਦਿਆਰਥੀ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ ਦੇ ਆਪਸੀ ਸੰਬੰਧਾਂ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I
	CO4: ਨਾਟਕ ਪੜ੍ਹਨ ਉਪਰੰਤ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਆਪਸੀ ਵਾਰਤਾਲਾਪ ਦੀ ਰੁਚੀ ਪੈਦਾ ਹੁੰਦੀ ਹੈ I ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਰਚਨਾਤਮਕ ਹੁਨਰ ਦਾ ਸੰਚਾਰ ਹੁੰਦਾ ਹੈ I
	CO5: ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸਮੂਹਿਕ ਰੂਪ ਵਿਚ ਕਾਰਜ ਕਰਨ ਦੀ ਭਾਵਨਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ I
	CO6: ਵਿਦਿਆਰਥੀਆਂ ਨਾਟਕ ਅਤੇ ਇਕਾਂਗੀ ਵਿਚਲੇ ਅੰਤਰ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰੱਥ ਹੁੰਦੇ ਹਨ I
	CO7: ਨਾਟਕ ਦੇ ਅਧਿਐਨ ਰਾਹੀ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਮੰਚ ਉੱਪਰ ਬੋਲਣ ਅਤੇ ਕੰਮ ਕਰਨ ਦੀ ਸਮਰੱਥਾ ਪੈਦਾ ਹੁੰਦੀ ਹੈ I ਇਸ ਨਾਲ ਜਿਥੇ ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਹੁਨਰ ਵਿਚ ਨਿਖਾਰ ਆਉਂਦਾ ਹੈ ਉਥੇ ਰੋਜ਼ਗਾਰ ਦੇ ਮੌਕੇ ਵੀ ਪ੍ਰਾਪਤ ਹੁੰਦੇ ਹਨ I
	Translated into English
	CO1: Students will know the theoretical aspects of
	literary genre drama and theater as well as the
	origin/outgrowth, development, and various trends
	of drama.
	CO2: By understanding the social, cultural, political and
	economic conditions of the society through the
	works of Punjabi dramatists, they are capable of
	bringing changes in them if necessary.
	CO3: Students are able to understand the
	interrelationship between drama and theatre.
	CO4: After reading the play, an interest in mutual
	dialogue arises among the students. Creative skills
	are imparted to the students.
	CO5: Students develop a sense of teamwork.

CO6: Students are able to understand the difference

CO7: Students develop the ability to speak and act on

between drama and solitude.

stage through the study of drama. With this,
where
the skills of the students improve, they also get
employment opportunities.

M.A. (POLITICAL SCIENCE)

This programme enhances the knowledge and creates the research the aptitude about political phenomena of local to global context. After the program, the students will be able to:

PO1: develop subject capabilities by trying to infuse and build social awareness of social responsibilities, understanding of contemporary issues, democratic values, inclusive, tolerance, and secularism, awareness of individual rights, duties and constitutional provisions and understanding of Indian foreign policies and international issues and relations

PO2: apply disciplinary or interdisciplinary learning across multiple contexts, integrating knowledge and practices. Effectively apply comparative, critical and analytical skills in reading and writing to address significant issues of the political world.

PO3: develop an exciting and supportive learning environment that is conducive to high quality research and related learning activities including debates, seminars and lectures.

PO4: develop a set of core skills in students to work with efficiency in the areas of teacher education, technology of teaching, educational administration and supervision.

PO5: increase awareness of career options available in the public and private sectors with postgraduate degree in political science. Also to make aware about its value as entry in politics, administrative services, teaching positions, legal education and various other fields.

PO6: demonstrate the quality to lead a team, country and format or an informal organization. The capacity to perform duties, effective planning and management, ability to interact effectively with people and also identifying and setting achievable goals, developing necessary strategies and outlining the tasks and schedules on how to achieve the set goals.

PO7: understand the complex and diverse social

Realities, and go for advanced education, academic research, inclusive education, social and gender justice.

PO8: perform the professional roles in state and society, such as political leader, educationalist and political analysts, Social Worker, Public Relations Assistant and Campaign Staffer and so on.

PROGRAM SPECIFIC OUTCOMES (PSOs)

After the program, the students can:

PSO1: have a firm foundation in the history of ideas as well as the more significant epistemological challenges in the social sciences through this program.

PSO2: engage themselves with the undercurrents of political practice and developmental process.

PSO3: critically reflect on the contemporary developments. Courses on comparative politics and international relations provide an overview of political developments at the global level.

Comparative analysis not only helps in understanding the patterns of institutionalism, democratization and development in various polities but also provide a framework for explaining variations.

PSO4: pursue specialized courses like human rights,
peace and conflict studies and state politics
introduces the students to certain new dimensions
of politics. By doing these courses, students
develop a solid footing over the vast field of
knowledge in the discipline that also in a way
encourages them to undertake future research in
these unconventional areas of political science.
PSO5: pursue career options in higher studies in fields
related to public policy, international politics and
law, gender studies, development studies,
Environmental and sustainable development, law
and survey research.

	SEMESTER-I		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES	
3164	Western Political thought-1	After the course, the students will be able to: CO1: describe the dominant features of Ancient Western Political Thought: Ancient Greek political thought with focus on Aristotle and Plato; Roman Political Thought: its contributions with special emphasis on the emergence of Roman law. CO2: examine the features of Medieval Political Thought. CO3: evaluate the Renaissance; political thought of Reformation; and Machiavelli. CO4: critically examine Bodin's contributions to the theory of Sovereignty; Hobbes as the founder of the science of materialist politics; Locke as the founder of Liberalism with focus on his views on natural rights, property and consent; and Rousseau's views on Freedom and Democracy; Bentham's	

		Utilitarianism; and John Stuart Mill's views on liberty and representative government. CO5: take an insight into the following: Hegel's views on Civil Society and State; Utopian and Scientific socialism: basic characteristics. CO6: examine the varieties of non-Marxist socialism:,
		Syndicalism, Guild Socialism, German Revisionism
3165	Key Concepts in Political Analysis	After doing this course, the student will be able to: CO1: discern the conceptual debates which underlie political phenomena. CO2: explain the key concepts needed to understand the political phenomenon. CO3: develop an understanding of the basic concepts in political theory and engage in critical analysis of the subject. CO4: develop an understanding of the basic concepts in political theory and engage in critical analysis of the subject. CO5: describe what is power and how does it operate in society and politics. CO6: dwell upon contemporary theories and views of scholars creating a deeper understanding and gain knowledge. CO7: explain different approaches to politics and build their own understanding of politics.
3166	Indian Politics: Institutions at Work	After the course, the students can: CO1: describe about the Constitution of India, important debates and the way the institutions have worked over the last more than six and half decades. CO2: describe the working of Indian political system and evaluate the basic strengths and weaknesses of the Indian political system through the application of

CO3: explain about the political philosophy, institutions, and processes in India with respect to various levels of government. CO4: explain about the working of Political parties and the way party politics in India has taken shape under diverse social settings. CO5: explain about constitutional Development in India. Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethnonationalism since 1990's. Tracing the growth of			political concepts and idea
levels of government. CO4: explain about the working of Political parties and the way party politics in India has taken shape under diverse social settings. CO5: explain about constitutional Development in India. Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO3: explain about the political philosophy, institutions,
CO4: explain about the working of Political parties and the way party politics in India has taken shape under diverse social settings. CO5: explain about constitutional Development in India. Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			±
the way party politics in India has taken shape under diverse social settings. CO5: explain about constitutional Development in India. Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			of government.
under diverse social settings. CO5: explain about constitutional Development in India. Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO4: explain about the working of Political parties and
CO5: explain about constitutional Development in India. Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			the way party politics in India has taken shape
Institutions of governance in India. Learn about leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			under diverse social settings.
leadership and decision-making process in India. Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO5: explain about constitutional Development in India.
Aware about working of Administration in India. CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. 3167 International Relations: An Historical Overview After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			Institutions of governance in India. Learn about
CO6: critically evaluate the Indian Party system – its development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			leadership and decision-making process in India.
development and looking at the ideology of dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. International Relations: An Historical Overview After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			Aware about working of Administration in India.
dominant national parties. CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. 3167 International Relations: An Historical Overview After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO6: critically evaluate the Indian Party system – its
CO7: evaluate the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role. 3167 International Relations: An Historical Overview After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			development and looking at the ideology of
on the Election Commission: Composition, Functions and Role. 3167 International Relations: An Historical Overview CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			dominant national parties.
Functions and Role. 3167 International Relations: An Historical Overview CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO7: evaluate the Electoral Process in India with focus
International Relations: An Historical Overview After the course, the students can: CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			on the Election Commission: Composition,
An Historical Overview CO1: explain about scope and subject matter of International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			Functions and Role.
Overview International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-	3167		After the course, the students can:
International Relations as an autonomous academic discipline. CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO1: explain about scope and subject matter of
CO2: describe the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			International Relations as an autonomous academic
Military capabilities in the making of foreign policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			discipline.
policy. CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO2: describe the role of Diplomacy, Propaganda and
CO3: explain certain basic concepts like Globalization in contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			Military capabilities in the making of foreign
contemporary world order. CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			policy.
CO4: describe the Cold War phases and understanding the post Cold War era. CO5: discuss the developments in European Ethno-			CO3: explain certain basic concepts like Globalization in
the post Cold War era. CO5: discuss the developments in European Ethno-			contemporary world order.
CO5: discuss the developments in European Ethno-			_
			post Cold War era.
nationalism since 1990's. Tracing the growth of			CO5: discuss the developments in European Ethno-
			nationalism since 1990's. Tracing the growth of
European Union			European Union
CO6: describe about emerging Issues in a Changing			l l
World like Ethnicity, environment, sustainable			CO6: describe about emerging Issues in a Changing
development, gender & peace.			World like Ethnicity, environment, sustainable

SEMESTER-II		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
3170	Western Political Thought (ii)	After the course, the students can: CO1: explain about the diverse intellectual political traditions in the west. CO2: describe the conceptual debate of fundamental political ideas in the west. CO3: critically analyze the political philosophy of western political thinkers. CO4: explain the development of Post Marxist ideology. CO5: discuss the central themes, concepts and ideas on the development of the contemporary tradition of western political thought. CO6: analyze the ideology in terms of empirical realism and apply these ideologies to the assessment of some current economic debate
3171	Comparative Politics-I: Understanding Advanced Industrial Societies	After completing the course students will be able to: CO1: develop a detailed understanding of theory and methods of comparative politics. CO2: explain the different models of political system and the way political dynamics have changed and shaped societies from time to time. CO3: explain the basic concepts and approaches of Comparative Politics. CO4: critically evaluate the problems and relevance of Comparative Politics. CO5: analyze contemporary issues and challenges before the state and Constitutionalism from the comparative Perspective.
3172	Indian Politics: Political Processes	After the completion of the course, the students can: CO1: develop a comprehensive understanding of political

		institutions and their functions in India.
		CO2: gain insights into the interconnections between
		social and economic relations and the political
		process in India.
		CO3: explain the challenges arising due to caste, class,
		gender and religious diversities and also analyze
		the
		changing nature of the Indian state in the light of
		these diversities.
		CO4: comprehend Indian politics beyond structural and
		constitutional perspectives.
		CO5: grasp Indian Politics in its entirety. The course will
		consolidate the knowledge base of the students
		about the dynamism of Indian Politics.
		CO6: explain the dialectical relationship between the
		Indian politics and its social universe.
3173	Theories of	After the course, the students can:
	International Relations	CO1: explain the major theories in IR, covering the entire
		disciplinary spectrum from mainstream approaches
		such as realism, liberalism and constructivism to
		critical approaches such as post-colonialism,
		postmodernism and feminism. Whereas the course
		content remains largely theoretical, both historical
		and contemporary practices are taken as illustrative
		examples, particularly illuminating non-Western
		perspectives.
		CO2: think creatively and critically in search of 'global'
		International Relations that is inclusive of non-
		Western perspectives and traditions
		CO3: explain the evolving nature of international
		systems, institution and processes.
		CO4: undertake academic assignments and research
		projects related with international issues which are
		becoming very salient in today's globalized world.
		CO5: acquire grounding in the academic debates and
<u> </u>	1	ı

		research literature in the field of international
		relations (IR), and understood how to apply key
		theories and concepts of IR to global and regional
		issues.
		CO6: significant developments in contemporary
		international relations.
		CO7: develop practical skills relevant to a career in
		international affairs, including in academia,
		research, international organizations, government,
		media and NGOs.
3174	Approaches to the	After the course, the students can:
	Study of International	CO1: explain about the contemporary international
		Politics.
		CO2: acquire grounding in the academic debates and
		research literature in the field of international
		relations (IR), and understood how to apply key
		theories and concepts of IR to global and regional
		issues.
		CO3: explain about different approaches which are
		applied in international relations.
		CO4: explain about the historical origins, key debates
		and emerging Trends in the discipline.
		SEMESTER-III
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
3176	Indian Political	After the course, the students can:
	Thought-I	CO1: explain the sources of Indian Political Philosophy.
		CO2: explain the relevant contributions of Indian Political
		Philosophy to the realm of political thought.
		CO3: describe the various philosophical underpinning of
		political ideologies in India.
		CO4: demonstrate knowledge and understanding of basic
		concepts of ancient and medieval Indian political

		India and develop a comparative understanding of
		Indian and western political thought.
3177	Comparative Politics (II): Understanding Developing Societies	After the course, the students can: CO1: get familiar with the debates on key concepts and theoretical perspectives in comparative politics. CO2: use conceptual tools to understand new developments in political experiences across the world in a historical, sociological, political economy, and institutional perspectives. CO3: develop a thorough understanding among students on how to study politics comparatively, that is, understand similarities and differences in political
		experiences CO4: describe about the function and role of the state.
3188	Comparative Political Systems with Special Reference to USA, UK, China, Japan and Switzerland	After the course, the students can: CO1: critically analyze the features of a liberal democratic and socialist political system with focus on UK, USA and the People's Republic of China. CO2: apply different approaches to explain the functioning of different types of governing regimes. CO3: critically reflect on critical aspects of electoral democracy that includes functioning of parties and the relation between representation and democracy. CO4: conduct an intensive comparative study of the Executive (UK, USA, Japan and Switzerland); Legislature (UK, USA and the PRC); the Judiciary (UK, USA and PRC). CO5: critically look at the rights of the citizens of UK, USA and PRC from a comparative perspective.
3179	International Organization (Option-A)	After the course, the students can: CO1: describe the contemporary relevance of the UN and

		its relationship with other IGOs
		CO2: contextualize recent international crises and their resolution.
		CO3: represent the country in diplomatic circles, armed
		with the proper knowledge of international
		organizations.
		CO4: describe the working of international organizations
		and regional organizations. Aware about the
		global challenges.
		CO5: analyze the role of U.N. and regional organizations
3180	Transnational Actors in	After the course, the students can:
	International Politics (Option-B)	CO1: explain about the limitations of state-centric
	(Option B)	framework and emergence of transnational actors.
		CO2: explain about the different types of transnational
		actors in International Politics
		CO3: critically analyze the Post-War Economy and the
		International Monetary System
		CO4: explain about the Cartelization of Natural
		Resources in the Age of Globalization and Issues
		and challenges in international environmental
		politics.
3181	Politics of	After the course, the students can:
	Development in India(Option-C)	CO1: explain about the concepts of Development,
	(meaning and changing conceptions. Economic
		growth. Human development. Sustainable
		development.
		CO2: explain about Development Strategies and State
		Policies in India.
		CO3: critically analyze the Socio-Economic Problems and
		Developmental Issues in India.
		CO4: explain about Globalization, Changing Policies,
		Strategies and their implications in India.
3182	Peace and Conflict	After the course, the students can:
	Resolution (Option-D)	CO1: enhance their analytical ability by learning about

		different models employed in conflict resolution.
		CO2: develop analytical outlook in conflict resolution on
		equitable, cooperative and non-violent techniques
		of conflict resolution and transformation.
		CO3: deliberate on peace movements across the world and
		especially in war torn regions will help students
		develop independent perspective on conflict
		resolution.
		CO4: describe issues like migration, information flow and
		normative concepts will augment students,
		understanding and knowledge.
		CO5: explain about negotiation and mediation skill for
		conflict resolution through active listening, different
		tracks of diplomacy and Gandhian methods.
		CO6: resolve issues of national security and conflict
		studies.
3183	Rethinking Geopolitics:	After the course, the students can:
	Critical Perspectives (Option-E)	CO1: rethink and radicalize its components 'geo' and
	(Option L)	'politics' so that the self-evident character and
		nuance of the sign 'geopolitics' can be
		conceptualized and pluralized.
		CO2: explain about Twenty-First Century Geopolitics
		specially USA, Russia, India and Pakistan
		CO3: enhance their understanding of The Geopolitics of
		Global Dangers of Terror.
		CO4: develop critical understanding about Geopolitics,
		anti-geopolitics, social movements and alternative
		political geographies
3184	Theories of	After the course, the students can:
	Development (Option-F)	CO1: explain about theories of modernization. Neoliberals
		and globalization, role of the state, welfare and redistribution.

		CO2: analyse Dependency, Underdevelopment and world system CO3: develop critical understanding about Impact of Postmodernism on Development studies and the Post development rejection of Development. CO4: explain about challenges before development like Aid, Role of Non-government Organizations and International Agencies, Displacement and Poverty etc.
3185	Public International Law-I (Option-G)	After the course, the students can: CO1: explain about international law and its role and significance in international politics and relations. CO2: explain about various disputes in international relations and various settlement means. CO3: describe about General Laws of Warfare in international politics. CO4: explain about different International Transactions Diplomatic Agents and Treaties.
3186	Democracy In India (Option A)	After the course, the students can: CO1: explain about Indian democracy in historical context. CO2: identify the need to accommodate social and cultural diversity in a democracy. They enable to understand how a democracy promotes acceptance of diversity. CO3: appreciate democracy forms for equality and dignity of all citizens. CO4: explain the institutional aspects of democracy and how institutions function within a constitutional framework in India. CO5: delve into how democracy as a model of governance can be complimented by institution building.

2107	Covernment 0- Daliti-	After the course the students com-
3187	Government & Politics of India's Neighbours	After the course, the students can:
	(Pakistan, Bangladesh,	CO1: explain how India's foreign policy evolved toward
	Nepal and Sri Lanka) (Option B)	its neighboring countries.
	(°F:::=')	Course and Dynamics
		Causes and Dynamics.
		CO3: analyse bilateral relations and multilateral SAARC.
		CO4: critically analyze India's policy toward its
		neighbours; and identify the key issues that strain
		India's bilateral relations with its neighbors.
3188	Women and Politics in	After the course, the students can:
	India (Option C)	CO1: apply knowledge as emerging global citizens by
		considering options for contributing to positive
		change.
		CO2: analyze the complex and gendered social, economic,
		and political aspects of globalization that
		disproportionately disadvantage and impact women
		in various locations around the world.
		CO3: recognize key women's human rights defenders who
		have made an important contribution to furthering
		the rights of women and girls.
		CO4: analyze key issues affecting women through a
		transnational feminist perspective, including
		immigration, education, maternal health,
		globalization, economics, and gender-based
		violence.
3189	Rights: Ideas and	After the course, the students can:
	Movements (Option D)	CO1: explain about the rights which generally they should
		act as a vigilant citizen of the country.
		CO2: take an analytic and critical stance and deal with
		questions of how rights affect social and political
		processes
		CO3: identify issues and problems relating to the
		, , ,

CO4: develops investigative and analytical skills. CO5: develop expertise in the field of human rights CO6: identify, contextualize and use information about the human rights situation in a given country. After the course, the students can: CO1: explain about the basic conceptual tools for approaching the study of nationalism. CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain about development policies and planning in India since independence.			realization of human rights.
CO5: develop expertise in the field of human rights CO6: identify, contextualize and use information about the human rights situation in a given country. After the course, the students can: CO1: explain about the basic conceptual tools for approaching the study of nationalism. CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence.			CO4: develops investigative and analytical skills.
The human rights situation in a given country. After the course, the students can: CO1: explain about the basic conceptual tools for approaching the study of nationalism. CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			CO5: develop expertise in the field of human rights
After the course, the students can: CO1: explain about the basic conceptual tools for approaching the study of nationalism. CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence. After the course, the students can: CO3: development in the development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence.			CO6: identify, contextualize and use information about
and Context (Option E) CO1: explain about the basic conceptual tools for approaching the study of nationalism. CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence.			the human rights situation in a given country.
CO1: explain about the basic conceptual tools for approaching the study of nationalism. CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. New Political Geography in Comparative Perspective (Option F)	3190	-	After the course, the students can:
CO2: draw on theoretical understandings of nationalism to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence.		and Context (Option E)	CO1: explain about the basic conceptual tools for
to understand complex, substantive case material. CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain about development policies and planning in India since independence. After the course, the students can: CO4: explain about development policies and planning in India since independence.			approaching the study of nationalism.
CO3: develop an in-depth knowledge of a major topic within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence.			
within the field of nationalism studies. CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence.			understand complex, substantive case material.
CO4: develop their independent research skills, in particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about the development policies and planning in India since independence.			CO3: develop an in-depth knowledge of a major topic
particular surveying literatures and developing thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence.			within the field of nationalism studies.
thematically organised bibliographies around chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain about development policies and planning in India since independence.			CO4: develop their independent research skills, in
chosen topics. CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence. After the course, the students can: CO3: explain the concepts and theories on motivation, leadership and conflict management in the			particular surveying literatures and developing
CO5: explain the role of different cultural and political organizations and ideologies which contributed to the freedom movement of India significantly. After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. Public Administration (Option H) After the course, the students can: CO1: explain about development policies and planning in India since independence. CO1: explain the concepts and theories on motivation, leadership and conflict management in the			thematically organised bibliographies around
organizations and ideologies which contributed to the freedom movement of India significantly. New Political Geography in Comparative Perspective (Option F) Perspective (Option F) Policies and Politics of Development in India (Option G) Public Administration (Option H) Public Administration (Option H) After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			chosen topics.
The freedom movement of India significantly. New Political Geography in Comparative Perspective (Option F) Perspective (Option F) Policies and Politics of Development in India (Option G) Public Administration (Option H) Public Administration (Option H) The freedom movement of India significantly. After the course, the students can: Co1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: Co1: explain about the development strategies and their impact on industrial and agricultural sphere. Co2: explain about development policies and planning in India since independence. After the course, the students can: Co1: explain the concepts and theories on motivation, leadership and conflict management in the			CO5: explain the role of different cultural and political
New Political Geography in Comparative Perspective (Option F) Policies and Politics of Development in India (Option G) Public Administration (Option H) After the course, the students can: CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. CO1: explain the concepts and theories on motivation, leadership and conflict management in the			organizations and ideologies which contributed to
Geography in Comparative Perspective (Option F) Perspective (Option F) CO1: examine the geopolitical economy of so-called 'resource wars', that is armed conflicts revolving to a significant degree over the pursuit or possession of critical materials. After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence. CO1: explain the concepts and theories on motivation, leadership and conflict management in the			the freedom movement of India significantly.
Comparative Perspective (Option F) a significant degree over the pursuit or possession of critical materials. Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO2: explain about development policies and planning in India since independence. CO3: explain the concepts and theories on motivation, leadership and conflict management in the	3191	New Political	After the course, the students can:
Perspective (Option F) to a significant degree over the pursuit or possession of critical materials. Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain about development policies and planning in India since independence. CO1: explain the concepts and theories on motivation, leadership and conflict management in the			CO1: examine the geopolitical economy of so-called
of critical materials. 3192 Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			,
Policies and Politics of Development in India (Option G) After the course, the students can: CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. Public Administration (Option H) After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			a significant degree over the pursuit or possession
Development in India (Option G) CO1: explain about the development strategies and their impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. Public Administration (Option H) After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			of critical materials.
(Option G) impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. Public Administration (Option H) After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the	3192	Policies and Politics of	After the course, the students can:
impact on industrial and agricultural sphere. CO2: explain about development policies and planning in India since independence. Public Administration (Option H) After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			CO1: explain about the development strategies and their
India since independence. Public Administration (Option H) After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the		(Option G)	impact on industrial and agricultural sphere.
Public Administration (Option H) After the course, the students can: CO1: explain the concepts and theories on motivation, leadership and conflict management in the			CO2: explain about development policies and planning in
(Option H) CO1: explain the concepts and theories on motivation, leadership and conflict management in the			India since independence.
leadership and conflict management in the	3193		After the course, the students can:
		(Option H)	CO1: explain the concepts and theories on motivation,
organization			leadership and conflict management in the
organization.			organization.

		CO2: explain the journey of discourse in public
		administration in the sense that how the old public
		administration view was contested by the idea of
		new public administration and subsequently the
		discourse moved beyond that and started talking
		about New Public Management and New Public
		Service.
		CO3: make a difference between the public administration
		and private administration.
		CO4: explain about the traditional and emerging theories
		and principles of public administration. This would
		also acquaint them with changing management
		practices in the light of expanding public works and
		the need for greater collaboration with non-state
		agencies.
		CO5: describe the pre-requisites for effective and just
		administration at various levels.
		CO6: explain about evolution and development of Indian
		Administration.
		CO7: analyze the working of Indian Administration.
		SEMESTER-IV
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
3196	Indian Political	After the course, the students can:
	Thought-II	CO1: demonstrate and familiarize with main ideas of the
		key Indian Political Thinkers. Analyze and compare
		the ideas and theories of Modern India Political
		Thinkers.
		CO2: answer why Gandhi favored Swadeshi and why he
		became the critique of modern Industrial
		Civilization.
		CO3: explain Vivekanand's criticism of the West and
		taking pride in the Indian religion on the one hand

		and critiquing Christianity and Islam on the issue of religious conversion. CO4: explain about the critical issues of Indian Political thought and debate them for knowing Indian tradition for building of Modern India and better future. It will help students to understand the Indian society and polity in better way.
3197	Foreign Policy of India	After the course, the students can: CO1: explain about the India's world view, geopolitical vision, and key principles and New Frontiers of Indian Foreign Policy and Diplomacy. CO2: analyse about geostrategic and economic, foreign policy and diplomacy which helps students understanding contemporary issues and problems in relations with other countries. CO3: describe the international events and foreign policy issues and developments in Indian Foreign Policy approaches. CO4: do research and join in many think tanks and research organizations. CO5: engage in the debates on Indian foreign policy.
3198	Parties and Electoral Politics in India (Option A)	After the course, the students can: CO1: explain the origin and ideologies of main national parties of India especially the BJP, The CPM, and the Indian National Congress. CO2: explain how the regional parties emerged and how their emergence challenged the hegemony of the national party like Indian the National Congress. CO3: explain the transformation in the nature of the regional parties in India. CO4: decode the election manifestoes of political parties and explain in what ways they converge and diverge on policy issues and programs.

		CO5: explain the New Social Movements, NGOs and their impact on political parties.
3199	State Politics in India (Option B)	After the course, the students can: CO1: explore the multiple dimensions of state as well as sub-state level politics in India in a comparative perspective. CO2: describe the federal process in India, the issues underlying political dynamics of regions, the changing power relations between centre and states over a period of time and the nature of party system and electoral politics at the state level. CO3: explain about the Dalit and Backward Classes Movements CO4: explain what the key issues are in State politics. CO5: explain Agrarian Politics in the States such as Green Revolution, Farmers' Movements.
3200	Decentralized Governance and Local Level Institutions in India (Option C)	After the course, the students can: CO1: observe the history and legislations of decentralization in India from pre independence to the passage of 73rd and 74th amendment Act. CO2: explain about challenges of Governance at the local level-autonomy, finance, personnel, participation. CO3: explain about Growth, Development and functioning of Panchayati Raj Institution from independence to present. CO4: explain regarding the concept of decentralization and devolution of power in India. CO5: explain about the various constitutional provisions and statutes pertains to decentralized governance in the country.
3201	Political Sociology With Special Reference to India (Option D)	After the course, the students can: CO1: gain insights into the interconnections between

		social and economic relations and the political
		process in India.
		CO2: explain about the challenges arising due to caste,
		class, gender and religious diversities and also
		analyze the changing nature of the Indian state in
		the light of these diversities.
		CO3: explain about the emergence of social movements in
		response to the development policies adopted by
		successive governments.
		CO4: create awareness of the different trajectories of
		specific social movements in India, their demands
		and successes.
		CO5: analyze social problems and understanding social
		dynamics.
3202	Representing 'India':	After the course, the students can:
	Geopolitical	CO1: explain about the historical background of Indian
	Imaginations (Option E)	politics.
	,	CO2: analyze The Indian Diaspora and dilemmas of
		Migration.
		CO3: explain about Crisis of Secularism and Changing
		contours of minority politics in India.
		CO4: explain about some of the critical issues like Rise
		of Hindutva and the Search for Alternative
		Geopolitical Imaginations.
3203	Dalit Movements and	After the course, the students can:
3203	Issues In India (Option F)	CO1: explain about the politics of the oppressed sections
		of society as expressed through a search for
		identity
		and through movements.
		CO2: analyze how the Dalit movement is following
		Ambedkar's idea of "Educate, Unite and Agitate".
		CO3: explain about development concepts and debates
		and the perspective of Dalit identity.
		CO4: explain about Reservation policy and Politics of
		Inclusion in India in better way.
1	ı	247

		CO5: evaluate the programmes and policies designed to
		rectify the forms of social injustice.
3204	Feminist Political Theory (Option A)	After the course, the students can: CO1: explain how different schools have understood patriarchy and feminist questions differently. CO2: explain the origin, evolution and key issues which are at the core of the feminist movement both in Anglo-American world and India. CO3: explain the Women position in contemporary Society. CO4: explain how the immense contribution that women make to the family are neglected in computation. CO5: analyze the various theories on gender and evaluate how gender identities are constructed.
3205	Major Themes in Recent Political Philosophy (Option B)	After the course, the students can: CO1: explain the development concepts and debates and the perspective of engendering development. CO2: explain the theoretical background of the concept Neoliberalism and Post Marxism.
3206	Readings in the philosophy of resistance and liberation (Option C)	After the course, the students can: CO1: employ philosophical texts to explain why a philosophical problem is significant and to critically evaluate attempts to solve a problem. CO2: reconstruct and critically evaluate philosophical arguments in written form.
3207	Contemporary Debates In The 20th Century Marxism (Option D)	After the course, the students can: CO1: examine the Marxist engagement with critical issues Capitalism, Colonialism, Socialism and Environmental Degradation. CO2: correlate the concept of Feminism and Marxism. CO3: critically evaluate the ideology of Marxism, Marxist thinkers and their major ideals and enables the students to think about its relevance

		and possibilities in the cotemporary world.
3208	Introducing Federalism	After the course, the students can:
	(Option E)	CO1: explain about the federal process in India and the
		changing power relations between centre and states
		over a period of time and the nature of party system
		and electoral politics at the state level.
		CO2: explain about the sources of these concepts and
		their historical development.
		CO3: use these concepts in order to critically research,
		analyses, and evaluate major issues in federalism.
		CO4: develop skills for research, argument, and analysis
		in order to effectively communicate their own
		perspectives on key concepts and issues in
		federalism.
3209	Public International	After the course, the students can:
	law-II (Option F)	CO1: explain both the legal and political aspects of
		international decisions and events.
		CO2: explain about the system of public international law
		which regulates relations between actors on the
		global stage.
		CO3: examine the operation and application of
		international law in practical contexts.
		CO4: develop effective skills, both orally and in writing,
		in the construction of legal argument and the
		independent and self-directed analysis on issues of
		international law.

MASTER OF COMMERCE (M.COM.)

PROGRAM OUTCOMES (POs)	After completion of this Program, the students will be able to:
	PO1: update themselves with the sound knowledge of
	Concepts, Structure and nature of Business

Finance.

PO2: utilize various aspects of financial accounting, its principles and the latest application-oriented accounting methods in the real world.

PO3: develop the decision-making skill regarding various

costing methods and practical applications of

PO4: apply the techniques of managing the business with special focus on marketing, Insurance and banking theory law and practices.

management accounting principles.

PO5: apply knowledge in all the spheres of commerce including entrepreneurial development.

PO6: use various application-oriented research techniques

and would have knowledge on how to use these techniques in business related problems.

PROGRAM SPECIFIC OUTCOMES (PSOs)

After completing master's in commerce, students are able to:

PSO1: develop an ability to apply knowledge acquired in problem solving.

PSO2: work in teams with enhanced interpersonal skills and communication.

PSO3: work in different domains like Accounting,

Taxation, HRM, Banking and Administration.

PSO4: start their own business.

PSO5: work in MNCs as well as private, and public companies.

PSO6: develop team-work, leadership and managerial and

administrative skills.

PSO7: go further for professional courses like CA/CS/CMA/CFA.

	SEMESTER-I		
COURSE CODE	COURSE TITLE	COURSE OUTCOME	
M.C.101	Managerial Economics	After completing the course, students will be able to: CO1: explain the concept of microeconomic theory and their use in business decision making. CO2: use various concepts to deal with business problems in a global economic environment. CO3: make cost effective suggestions. CO4: Develop a top scale database program that identifies obstacles.	
M.C.102	Quantitative Methods for Business	After the end of the course, the students will be able to: CO1: use the econometric technique for estimate relationship between relevant variables and that forecast their values. CO2: get skilled in proper deployment of resources. CO3: choose an optimum strategy. CO4: use various elements of quantities including numbers symbols and mathematical expressions in management. CO5: explain the importance of statistical techniques for managerial decision making. CO6: predict the business and economic situations.	
M.C.103	Modern Accounting Theory & Reporting Practices	Students after doing this course, will be able to: CO1: state the meaning, need and benefits of harmonization of Reporting Practices. CO2: explain the requirements of various National and International Accounting Standards. CO3: review the important National and International bodies involved in the process and steps followed in framing an accounting standard. CO4: apply the accounting standards framed with their related requirements.	
M.C.104	Organisation Theory	After completing this course, students will be able to:	

	and Behaviour	CO1: develop a theoretical understanding of structure and
		behaviour of organization.
		CO2: realize the competitiveness of firm.
		CO3: describe the organization culture, development and
		stress management.
		CO4: analyze the different aspects of OB.
MC105	Marketing Management	After the completion of course, students will be able to:
		CO1: state the importance of marketing management.
		CO2: describe the components of marketing mix.
		CO3: state the role and functions of marketing within a
		range of organizations.
		CO4: describe key marketing concepts, theories and
		techniques for analyzing a variety of marketing
		situations.
		CO5: state the relevance of marketing concepts and
		theories in evaluating the impacts of environmental
		changes on marketing planning, strategies and
		practices.
		CO6: identify and demonstrate the dynamic nature of the
		environment in which marketing decisions are
		taken.
		After the completion of course, students will be able to:-
M.C.106	Management	CO1: enhance skills about the technical and strategic
	Information System	issues related to MIS.
		CO2: describe MIS and its different characteristics.
		CO3: state and apply Transaction Processing System in
		an organization.
		CO4: explain the formal and informal structures of MIS.
		CO5: describe about development of systems and its
		Implementation.
M.C.107	A Workshop on IT	After the completion of course, students will be able to:-
	Applications in Commerce	CO1: use IT applications in the organizations.
	Commerce	CO2: use spread sheet.
		CO3: describe about the DBMS and its use in
		organization.
	1	252

		CO4: describe about the various business models of IT.	
	SEMESTER-II		
M.C.201	Business Environment	Students after the end of the course, will be able to:	
		CO1: successfully conduct the business.	
		CO2: formulate action plans.	
		CO3: take the advantage of environmental opportunities.	
		CO4: explain concepts of macroeconomics and the macro	
		environment in which a business organization	
		operates.	
		CO5: analyze and understand the macroeconomic policies	
		of the government implemented from time to time	
		and assess their impact on business.	
M.C.202	Research Methodology	After the completion of course, students will be able to :-	
	in Commerce	CO1: describe about research methodology.	
		CO2: apply advanced statistical techniques like	
		Discriminate Analysis, Logistic Analysis and	
		Factor Analysis.	
		CO3: handle different types of data.	
		CO4: use suitable statistical techniques in research.	
		CO5: interpret the results obtained.	
		CO6: tabulate the data.	
		CO7: handle qualitative as well as quantitative data.	
		CO8: draw conclusions about the population on the basis	
		of sample.	
M.C.203	Financial Management and Policy	After the completion of the course, students will be able to	
		CO1: state the various sources of Finance.	
		CO2: describe the various uses for Finance.	
		CO3: apply the techniques used in Financial management. CO4: explain about the functions of Finance.	
		CO5: identify the different types of Finance.	
		CO6: describe this relationship between finance with other allied disciplines.	
		CO7: state the meaning of Capital budgeting.	
		CO8: describe about capital expenditure.	

		CO9: point out the significance of Capital budgeting. CO10: describe the Capital budgeting process.
		CO11: spell out the factors influencing investment
		decisions.
		CO12: describe the kinds of Capital budgeting decisions. CO13: analyze the combined effects of financial and
		operating leverages.
M.C.204	Production and	After the completion of course, students will be able to:
	materials management	CO1: describe about different ways of purchasing for
		proper cost management.
		CO2: enhance the skills of students to negotiate
		with different suppliers for purchasing.
		CO3: apply different statistical methods for price determination.
		CO4: describe about Work Study.
		CO5: state about facilities location and layout.
M.C.205	Operations Research	After finishing this course, students will be able to:
141.0.205	Operations Research	CO1: recall the different concepts of OR.
		CO2: state the practical applicability of OR techniques in
		different fields.
		CO3: solve the problems of OR.
		CO4: describe the techniques of OR for problem solving.
M.C.206	Business Policy & Strategic Management	After the consummation of this course, the students will get skilled in:
		CO1: expressing the meaning, need and benefits of
		Business Policy and Strategic Management
		CO2: explaining the important concepts and techniques
		used for the same.
		CO3: describing in detail, the process involved in Strategic
		Management.
		CO4: apply various e-commerce business models in a
		company.
M.C.207	Summer Training Report and Viva Voce	After completion of the training and preparing the report, the students will be able to:
		CO1: develop conceptual and applied research skills as

		well as competencies required for effective problem
		solving and right decision making.
		CO2: gain opportunity to work in various types of
		situations.
		CO3: explore career alternatives for future by assessing
		their interests and abilities in their field of study.
		CO4: develop work habits and attitudes necessary for job
		success.
		CO5: practice and improve their industry skills while also
		learning how to work.
		CO6: articulate and apply principles learned in and outside
		of the classroom to a specific job.
		SEMESTER-III
MC 301	Business Performance	At the end of this course, students will be able to:
	Measurement	CO1: describe the meaning, need and benefits of measuring
		the performance of business.
		CO2: understand the various techniques involved in
		measuring the same.
		CO3: explain the new developing concepts in the field.
		CO4: apply the modern methods of measuring business
		performance.
MC 302	Tax Planning and	After completing this course, students will be able to:
	Management	CO1: explain the structure of direct and indirect taxes in
		India.
		CO2: define tax planning, tax avoidance, and tax evasion.
		CO3: apply the latest provisions of the Indian tax laws
		CO4: analyze the judicial pronouncements pertaining to
		corporate enterprises having implications for
		various
		aspects of corporate planning.
		CO5: explain GST concepts in business world.
MC 303	Integrated Marketing Communication & Brand Equity	After the completion of this course, student will be able to:

		CO1: explain the integrated role of promotion techniques
		CO2: explain about methods of advertising.
		CO3: analyze various marketing models such as
		AIDA, THINK/FEER/DO
MC 304	Marketing Research	After the completion of this course, student will be able to:
		CO1: describe the concept, tools and techniques of
		marketing research.
		CO2: apply research techniques to aid marketing decision
		making.
		CO3: recognize the importance of marketing research in a
		business organization.
MC 305	Human Resource	After completion of the course, students will be able to:
	Development	CO1: apply the principles and techniques as professional in
		organizations they work for.
		CO2: explain the concepts, techniques, and practices of
		human resource development.
		CO3: explain the basics of Human Resource Development
		CO4: describe about HRD culture, HRD activities and
		applications and contemporary HRD trends and
		practices.
		CO5: describe HRD process including implementation and
		Evaluation.
MC 306	Industrial Relations	After the completion of this course, students will be able to:
		CO1: recall the concept of industrial relation.
		CO2: sketch the importance of industrial relations for
		business organizations.
		CO3: locate how the industrial relations provide dynamics
		to organizations.
MC 307	India's Foreign Trade and Investment	After the completion of this course, student will be able to:
		CO1: explain the structure and policy framework of India
		foreign trade and investment.

		CO2: conduct in depth analysis of the concepts of export
		promotion measure and facilities.
MC 308	Management of International Business Operations	After the completion of this course, student will be able to: CO1: explain the management complexities, issues and approaches to international management. CO2: deal with organizational and control aspects of international operations.
		CO3: conduct in depth analysis of international marketing management and international human resource management.
MC 309	Strategic Cost Management	After studying this course, students will be able to: CO1: recall the relationship of strategy with Cost
MC 310	International Accounting	After the completion of this course, student will be able to: CO1: develop conceptual knowledge and understanding of international accounting issues CO2: become capable of tackling issues in prevailing regulatory environments CO3: appraise concepts such as: Transfer pricing, Foreign currency translations, Strategic planning
MC 311	Industrial Economics	After the completion of this course, student will be able to: CO1: describe the economic concepts as applied to industrial behavior. CO2: analyze and take decisions in respect of a firm and industry operations. CO3: analyze economies of size, economies of non-price decision of firm in detail.

Applied Econometrics	After the completion of this course student, will be able to:
	CO1: define the methodology of econometrics.
	CO2: become capable of applying econometrics to business
	problems.
	CO3: give special emphasis on application aspects with
	theoretical understanding.
Bank Management	After the completion of this course, student will be able to:
	CO1: analyze banking structure of India in detail.
	CO2: recognize the concept of E-banking in detail and
	know how e-banking develops the financial sector.
	CO3: conduct in depth analysis about NPA and investment
	management and their recent developments.
Insurance Management	After the completion of this course student, will be able to:
	CO1: explain the concept of insurance, the risk and its
	Management.
	CO2: analyse various insurance policies and their structure
	along with the legal dimensions involved.
	CO3: recognize the concept of insurance company
	management.
Workshop on Financial	At the end of the course, students will be able to:
Markets and Instruments	CO1: describe the financial system and its constituents, the
	principles on which it operates inter-linkages and
	regulatory concerns.
	CO2: develop an understanding of the degree of financial
	exclusion, its causes and difficulties in measurement
	as well as a critical analysis of different financial
	inclusion initiatives taken the world over.
	CO3: analyze different types of depository and non
	Bank Management Insurance Management Workshop on Financial Markets and

		depository institutions and their primary roles.
		CO4: develop better understanding of money and capital
		markets and their roles, interlink ages and regulatory
		concerns.
		CO5: describe about the working of mutual funds, pension
		funds, insurance companies, hedge funds, venture
		capital funds and private equity.
		SEMESTER-IV
MC 401	Project Planning and Control	Students will acquire the skill after completing the course:
	Control	CO1: to create plan and control a new enterprise.
		CO2: to identify the risk and develop plans to address and
		mitigate the issues.
		CO3: to analyze project data to keep cost and schedules on
		track.
		CO4: to effectively utilize the resources timely decisions
		coordination.
MC 402	Knowledge	After finishing this course, students will be able to:
	Management	CO1: state the concepts of knowledge management
		CO2: explain the knowledge management used in every
		field
		CO3: apply the methods of KM according to requirements
		CO4: describe the KMS and expert system
MC 403	Business Ethics and Corporate Governance	After the completion of this course student, will be able to:
		CO1: apply the knowledge of business ethics and ethical
		conflict in a business concern.
		CO2: recall the role of corporate governance and its
		increasing impact in the management of
		organizations.
		CO3: examine various ethical concepts such as: Ethical
		dilemma, ethical leadership, Whistle blowing.
MC 404	Advertising and Sales	After the completion of this course, student will be able

	Management	to:
		CO1: become capable of conducting in-depth
		understanding of the modern concepts and latest
		techniques of advertising.
		CO2: analyse the concepts of personal selling and sales
		force management which constitutes a fast growing
		area of marketing.
		CO3: sketch the importance of advertising for a business
		Organization.
MC 405	Services Marketing	After the completion of this course, student will be able to:
		CO1: describe about the service product and key elements
		of service marketing mix.
		CO2: deal with managing the service delivery process
		CO3: differentiate the implementation of services
		Marketing.
MC 406	Consumer Behavior	After the completion of this course, student will be able to:
		CO1: recognize the importance of knowledge of consumer
		behavior for developing effective marketing strategy. CO2: conduct in –depth understanding of the consumer and
		industrial buying process.
		CO3: understand determinants of consumers as relevant for
		marketing decision making.
MC 407	Organizational Change and Development	After the completion of this course, student will be able to:
		CO1: conduct in depth understanding of Behavioral
		Interventions.
		CO2: apply Behavioral Interventions for building team,
		system and process related competencies.
		CO3: be trained to help business organizations to achieve
		peak performance and become self-sustaining.
MC 408	Training and Development	After the completion of this course, student will be able to:

		CO1: describe the concepts and principles of training and
		development of human resource.
		CO2: recall about the environment of a firm.
		CO3: provide training to human resource of a business firm.
MC 409	Compensation Management	After the completion of this course, student will be able to:
		CO1: recognize various issues related to compensation in
		corporate sector.
		CO2: impart skills in designing, analyzing, and
		restructuring, compensation management system
		and policies and strategies.
		CO3: identify role of compensation in organization.
MC 410	International Business Environment	After the completion of this course, student will be able to:
		CO1: identify types and significance of Foreign
		Investment.
		CO2: explain the concepts of International Monetary
		System and Foreign Exchange Marketing.
		CO3: conduct overall study of International Business
		environment and factors affecting it.
MC 411	Global Financial Management	After the completion of this course, student will be able to:
		CO1: describe about foreign currency derivatives, forward,
		future and option markets.
		CO2: identify the concepts of forex exposure and risk
		Management.
		CO3: recognize how to determine foreign exchange rate.
MC 412	International Marketing Management	After the completion of this course, student will be able to:
		CO1: conduct in-depth understanding of International
		Marketing, its dimensions and framework.
		CO2: analyse environment affecting International Business
		and recent trends in Indian foreign trade.
	i e	

		CO3: identify new techniques and developments in
		International Marketing.
MC 413	Advanced Corporate Accounting	At the end of the course, the students will be able to: CO1: apply the Advanced Accounting in the field of corporate world. CO2: recall the theoretical and practical knowledge regarding the important concepts: Business Acquisitions, Mergers and Reconstruction, Goodwill and Shares Valuations, Consolidation of accounts. CO3: use the various related standards and provisions of accounting. CO4: prepare financial statements according to the Companies Act.
MC 414	Security Analysis and Portfolio Management	After completion of the course, students will be able to: CO1: apply the various techniques of analysis used in investment decisions. CO2: interpret the concepts of portfolio analysis and efficient portfolio management. CO3: demonstrate their knowledge in valuation of equity instrument and valuation of bonds. CO4: measure the performance of portfolio. CO5: take decision of investment in future.
MC 415	Advanced Auditing	After finishing this course, the students will be able to: CO1: describe the meaning and concept of Auditing CO2: recall the rights, duties and liabilities of an Auditor. CO3: use various auditing standards. CO4: identify other thrust areas. CO5: compare between the audits done by different institutions.
MC 416	Macro-Economic Analysis and Policy	After the completion of this course student will be able to: CO1: conduct in depth analysis of macroeconomic theory and policy with focus on applications, especially in

		context of developing economies like India.
		CO2: conduct labor market and policy analysis in the
		medium and long run.
		CO3: apply various macroeconomics tools in practice in
		respect to open and closed economies.
MC 417	Economics of Services	After the completion of this course student will be able to:
		CO1: describe about the Economics of various kinds of
		Services.
		CO2: recognize the related issues arises in Economics of
		Services.
		CO3: identify how to solve the issues that arises in the
		Economics of Services.
MC 418	World Trading System	After the completion of this course, student will be able to:
		CO1: identify economic principles relating to International
		Trade mercantilism, comparative advantage and
		gains from trade.
		CO2: conduct analysis of the covered agreements of the
		WTO.
		CO3: recognize challenges to the multilateral trading
		System.
MC 419	Bank Legislation	After the completion of course student, will be able to:
		CO1: appraise the practices of banking law.
		CO2: identify various banking laws and understand recent
		developments in the banking system.
		CO3: develop an understanding of various laws affecting
		Banks.
MC 420	Risk Management	After the completion of this course, student will be able to:
		CO1: describe the principles and practices of Risk
		Management.
		CO2: frame the optimum strategy for the handling of Risk
		in the organization.

		Organizations.
MC 421	Actuarial Practice	After the completion of course, student will be able to:
		CO1: apply the principles and techniques of actuarial
		Practice.
		CO2: conduct in depth analysis of special and joint life
		annuities and assurances.
MC 422	COMPREHENSIVE VIVA-VOCE	Student after going through the viva-voce will be able to judge his/her hold on the subject and will also develop the confidence of facing an interview.

M.SC. (CHEMISTRY)

DDOCD AM OUTCOMES (DO)	Condense of the state of the same of the state of the sta
PROGRAM OUTCOMES (POs)	Students after completing this course, will be able to:
	PO1: demonstrate and apply the fundamental knowledge
	of the basic principles in various fields of Chemistry.
	PO2: develop critical thinking which will be able to put
	forward new ideas, explain observations and draw
	logical inference form scientific studies in field of
	chemistry.
	PO3: apply knowledge to build up small scale industry for
	developing smart product.
	PO4: develop ability to solve complex chemical problems,
	e.g., analysis of data, synthetic logic, spectroscopy,
	structure and modeling, team-based problem solving,
	etc. which are essential skills to succeed in field of
	research or in industry.
	PO5: apply various aspects of chemistry in natural
	products and its isolations, pharmaceuticals, dyes,
	textiles, polymers, petroleum products, forensic etc.
	and also to develop interdisciplinary approach to the
	subject.
	PO6: develop ability to handle standard laboratory
	equipment, modern scientific instruments, planning

and performing are two states of emperiors.
PO7: create awareness and sense of responsibilities
towards environment and apply knowledge to solve
the issues related to Environmental pollution.

and performing the laboratory experiments.

Program Specific Outcomes (PSOs)

This course will enable the students to:

PSO1: apply the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life. They will also be able to acquire knowledge about the fundamentals and applications of chemical and scientific theories.

PSO2: find that every branch of science and technology is related to Chemistry. They will develop scientific outlook not only with respect to science subjects but

also in all aspects related to life.

PSO3: get familiar with the different branches of chemistry

like analytical, organic, inorganic, physical, environmental, polymer and biochemistry. They will also learn to apply appropriate techniques for the qualitative and quantitative analysis of chemicals in laboratories and in industries.

PSO4: apply the knowledge of Chemical

Thermodynamics, Kinetics, Electrochemistry,

Atomic Structure, Organic Chemistry,

Spectroscopy

and Skill in Industrial Chemistry.

PSO5: use chemistry as a tool and the faculty of logical reasoning that is prepared to serve in diverse fields.

PSO6: work in projects at different research as well as academic institutions.

	SEMESTER-I		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES	
СН -411	Inorganic Chemistry I	Students after completing this course, will be able to: CO1: describe about different types of chemical bonds present in inorganic compounds and Metal-Ligand bonding. Also the limitations of crystal field theory and molecular orbital theory make them understand the need of other theories. CO2: understand the Metal-Ligand Equilibria in solution, Stepwise and overall formation constant and their interaction, chelate effect. CO3: explain Stereochemistry and bonding in Main Group compounds using VSEPR, Walsh diagrams and Bent rule. CO4: explain about Reaction Mechanism of Transition Metal Complexes, inert and labile complexes, kinetic Application of valance bond and crystal field theories. CO5: describe the chemistry of Substitution reactions in square planar complexes, the trans effect, mechanism of substitution reaction.	
СН -412	Organic Chemistry I	Students after this course, will be able to: CO1: describe about quantitative treatment to The Hammett equation and linear free energy relationship. CO2: describe the nature of bonding involved in organic compounds. CO3: explain about aromatic, non-aromatic and anti- aromatic compounds using Huckel Rule.	

		CO4: demonstrate about different techniques used or
		determination of reaction mechanism.
		CO5: state the basics of stereochemistry such as types of
		representation of 3-D structures, enantiomers,
		Di stereoisomers, racemic mixtures, resolution and
		how to carry out asymmetric synthesis.
		CO6: describe about conformational isomers and their
		effect on physical and chemical properties of various
		systems.
		CO7: explain the stereochemistry of six member rings and
		fused ring systems.
		CO8: explain the geometrical isomerism and its effect on physical properties.
		CO9: describe the types and mechanisms of Substitution
		reactions in organic chemistry.
CH -413	Physical Chemistry I	Students, after this course, will be able to:
		CO1: explain the Fundamental concepts of quantum
		mechanics which will help them to study
		Schrodinger wave equation to particle in three
		dimensional box, simple harmonic oscillator and
		rigid rotator.
		CO2: describe the operators and postulates of quantum
		mechanics, Approximate Methods, the variation
		principle and perturbation theory.
		CO3: explain the Huckel theory of conjugated systems,
		bond order and charge density calculations and
		application to ethylene, allyl, butadiene,
		cyclopropenyl systems.
		CO4: explain the laws of thermodynamics and the
		theoretical concepts of generalized forces and
		coordinates, work, and thermodynamic potentials.
		CO5: describe the meaning and the role of thermodynamic
		description of systems.
		CO6: describe methods of statistical thermodynamics,

		concepts of phase space and phase integral,
		temperature and chemical potential.
		CO7: investigate various phenomenon involving Ion-
		solvent interactions, Ion - ion interactions: Debye –
		Huckel theory of ion - ion interactions.
		CO8: explain about various phenomenon viz.
		Electrokinetic phenomenon, Electrocatalysis,
		Electrochemical Energy Conversion and Electricity
		Storage.
CH -414	Mathematics for	Students, after this course, will be able to:
(a)	Chemists	CO1: describe about Vectors and its types including Vector
		Calculus, Matrix and its properties, Determinant and
		its properties. Application of these concepts to solve
		problems related to Huckel Theory.
		CO2: define the derivative and integral of the
		trigonometric, logarithmic and inverse trigonometric
		and rational functions.
		CO3: state about Elementary differential equations and its
		applications to chemical kinetics, secular equilibria,
		quantum chemistry, etc. Solutions of differential
		equations by the power series method, second order
		differential equations and their solutions.
		CO4: describe about Differential Calculus, functions,
		continuity and differentiability. Learning of Rules
		for differentiation will make them able to solve
		problems of maxima and minima including Bohr's
		radius and most probable velocity from Maxwell's
		distribution.
		CO5: state about basic rules for integration, integration by
		parts, partial fraction and partial differentiation.
		Applications of integral calculus will help them in
		studying Functions of several variables, co-ordinate

		transformations and curve sketching.
		CO6: state about Permutations and combinations,
		probability, probability theorems and probability
		curves. These concepts will make them to explain
		examples from the kinetic theory of gases.
CIT 414	D: 1 6	
CH -414 (b)	Biology for	Students, after this course, will be able to:
	Chemists	CO1: describe the Cell Structure and Functions including
		structure of prokaryotic and eukaryotic cell as well
		as will be able to do comparison of plant and animal
		cells.
		CO2: give the overview of metabolic processes as
		catabolism and anabolism. They will learn about the
		Origin of life and unique properties of carbon.
		CO3: state the structure and organization of cell membrane
		and cell wall, process of membrane transport and
		membrane models.
		CO4: describe about Biomolecules and its building blocks.
		Structure and functions of important derivatives of
		monosaccharides.
		CO5: state about the Lipids, fatty acids, their structures and
		function of triacylglycerols, glycerophospholipids,
		cholesterol, bile acids, prostaglandins.
		CO6: describe about Bioligical membrans and Lipid
		metabolism as well as beta oxidation of fatty acid.
		CO7: state the chemical and enzymatic hydrolysis of
		proteins to peptides, amino acid sequencing. Also
		about the Secondary structure of proteins.
		CO8: describe about Structure of ribonucleic acids RNA
		and deoxyribonucleic acids DNA, double helix
		model of DNA and forces responsible for holding it.
CH -414	Computer for	Students, after this course, will be able to:
(c)	Chemists	CO1: state about Computer and the basic concept
		associated with C-Language and program
	1	associated with C-Language and program

		designing.
		CO2: develop different programs, Run and Retrieve results.
CH -415	Laboratory Course	Students, after this course, will be able to:
	Inorganic Chemistry	CO1: explain about Gravimetric estimation of two
		constituents when present together in a given
		complex.
		CO2: do analysis of two cation-system using EDTA.
		CO3: state about laboratory ethics, safety, cleanliness
		waste management of the laboratory.
CH -416	Laboratory Course	Students, after this course, will be able to:
	Organic Chemistry	CO1: show the essential laboratory skills required for
		organic synthesis by performing synthesis of
		important organic compounds.
		CO2: describe the different purification techniques in
		organic chemistry like recrystallization, distillation,
		steam distillation and extraction.
		CO3: use safety techniques and handling of chemicals.
		CO4: carry out different types of reactions and their
		workup methods.
		CO5: do synthesis of various organic compounds involving
		different types of Organic reactions.
CH -417	Laboratory Course	Students, after this course, will be able to:
	Physical Chemistry	CO1: prepare the solution of the desired concentration and
		the desired volume, maintain laboratory ethics,
		safety and cleanliness. Understand waste
		management of the laboratory.
		CO2: use the physical methods to calculate surface tension
		and viscosity of various solvents and their unknown
		percentage mixtures.
		CO3: compare the cleansing power of detergents and
		precipitation of various ions. They will also learn to
		determine critical micelle concentrations of

		surfactants.
	Co	O4: determine the partial molar volume and solubility of
		various inorganic salts.
	Co	O5: plot accurate graphs of the desired scale for the
		calculations.
	S	EMESTER-II
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
CH -421	Inorganic Chemistry I	After completing this course, the students will be able to:
		CO1: describe about Electronic Spectra and Magnetic
		Properties Of Transition Metal Complexes
		through Orgel and Tanabe-Sugano diagrams for
		transition metal complexes-I and II.
		CO2: explain about the Metal carbonyls and their
		structure and bonding, vibrational spectra of
		metal carbonyls along with structure elucidation.
		CO3: demonstrate the Importance of reactions of metal
		carbonyls and their preparation in various fields.
		CO4: describe about the chemistry of Metal Cluster
		such as higher boranes, carboranes,
		metallobranes metallocarboranes and compounds
		with metal-metal multiple bonds.
CH -422	Organic Chemistry I	Students, after this course will be able to:
		CO1: describe the relationship of structure and
		reactivity in organic reactions through
		Hammond's postulate, Curtin-Hammett
		Principle and isotopes effects.
		CO2: explain about the types and mechanisms of
		elimination reactions in organic chemistry as well
		as Mechanism and orientation in pyrolytic elimination.

		CO3: describe the addition reactions to C-C and
		Carbon-hetero multiple bonds by using regio and
		chemoselectivity concepts. A number of naming
		reactions will help them to justify the industrial
		need of this topic.
		CO4: explain the concepts of Free radical reactions and
		its types, the effect of solvents on reactivity and
		the synthetic importance of these materials.
		CO5: describe about the pericyclic reactions utilizing
		molecular orbital symmetry and frontier orbitals
		concepts of various organic compounds. Also the
		Classification of pericyclic reactions through
		Woodward-Hoffmann correlation diagrams and
		FMO /PMO approach.
CH -423	Physical Chemistry I	Students, after this course, will be able to:
		CO1: describe about Fundamental concepts of chemical
		dynamics such as Methods of determining rate
		laws.
		CO2: describe about the kinetics of enzyme reactions,
		dynamics of molecular motion and unimolecular
		reaction.
		CO3: explain about the study of fast reactions by flow
		method, relaxation method, flash photolysis, and
		NMR method.
		CO4: describe about the Thermodynamic criteria for
		non-equilibrium states, entropy production and
		entropy flow.
		CO5: describe the phenomenological equators,
		microscopic reversibility and Onsager's
		reciprocity relations, electro kinetic
		phenomenon.

when they perform experiments in lab. CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel Jerrum model. Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric			in detail through chain configurations of
CO7: recognize the different concepts of Adsorption and Micelles of surface chemistry. Theoretical knowledge of these concepts will help them when they perform experiments in lab. CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel Jerrum model. CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy.			macromolecules and calculation of average
and Micelles of surface chemistry. Theoretical knowledge of these concepts will help then when they perform experiments in lab. CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel Jerrum model. Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NMR) and Nuclear Quadrupole Resonance (NMR) spectroscopy.			dimensions.
knowledge of these concepts will help then when they perform experiments in lab. CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel-Jerrum model. CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy.			CO7: recognize the different concepts of Adsorption
when they perform experiments in lab. CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel Jerrum model. CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			and Micelles of surface chemistry. Theoretical
they perform experiments in lab. CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel- Jerrum model. Sudents, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			knowledge of these concepts will help them
CO8: describe about Electrochemistry and Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel Jerrum model. CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. Students, after this course will be able to:			when
Electrocatalysis through Debye-Huckel treatment, and its extension to Debye-Huckel-Jerrum model. CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and heir comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NQR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			they perform experiments in lab.
treatment, and its extension to Debye-Huckel- Jerrum model. CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			CO8: describe about Electrochemistry and
CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			Electrocatalysis through Debye-Huckel
CH -424 Group Theory, Spectroscopy and Diffraction Methods Students, after this course, will be able to: CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			treatment, and its extension to Debye-Huckel-
Spectroscopy and Diffraction Methods CO1: describe about the concepts of group theory and its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			Jerrum model.
Diffraction Methods its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:	CH -424		Students, after this course, will be able to:
its uses in octahedral, tetrahedral, square planar and trigonal bipyramidal complexes. CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			CO1: describe about the concepts of group theory and
CO2: describe about the applications of group theory, in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:		Diffraction Methods	its uses in octahedral, tetrahedral, square planar
in spectroscopy by studying inorganic complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			and trigonal bipyramidal complexes.
complexes, using great orthogonality theorem and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			CO2: describe about the applications of group theory,
and character tables. CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			in spectroscopy by studying inorganic
CO3: explain about Microwave, Raman, Molecular and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			complexes, using great orthogonality theorem
and Vibrational Spectroscopy. These concepts will generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			and character tables.
generate a view to study spectroscopy through physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			CO3: explain about Microwave, Raman, Molecular and
physical and quantum mechanical aspects. CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			Vibrational Spectroscopy. These concepts will
CO4: describe the basic Principles of Photoelectric Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			generate a view to study spectroscopy through
Effect and Diffraction by learning the methods to determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			physical and quantum mechanical aspects.
determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			CO4: describe the basic Principles of Photoelectric
determine Miller indices and Bragg's condition. Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			Effect and Diffraction by learning the methods
Principal and applications of neutron diffraction and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			
and electron diffraction and their comparison. CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			
CO5: explain the basic concepts in Nuclear Magnetic Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			
Resonance (NMR) and Nuclear Quadrupole Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			
Resonance (NQR) spectroscopy. CH -425 Laboratory Course Students, after this course will be able to:			
CH -425 Laboratory Course Students, after this course will be able to:			
			Resonance (NQR) spectroscopy.
Inorganic Chemistry CO1: prepare the different inorganic compounds and	CH -425	Laboratory Course	Students, after this course will be able to:
		Inorganic Chemistry	CO1: prepare the different inorganic compounds and

		utilize them in further reactions.
		CO2: interpret the electronic spectrum and magnetic
		properties of synthesized compounds.
CH -426	Laboratory Course	Students, after this course, will be able to:
	Organic Chemistry	CO1: separate the solid-solid/ solid-liquid/ liquid-
		liquid mixture of two organic compounds.
		CO2: identify the functional groups by using different
		qualitative lab techniques.
		CO3: identify the organic compounds by different
		conformation tests and by preparation of
		derivatives.
		CO4: do Separation of organic mixture by preparation
		of TLC plates.
CH -427	Laboratory Course	Student, after this course will be able to:
	Physical Chemistry	CO1: prepare the solution of the desired concentration
		and the desired volume and Maintain laboratory
		ethics, safety and cleanliness.
		CO2: describe the principle and safe handling of Flame
		Photometer, Potentiometer and Polarimeter.
		CO3: plot accurate graphs of the desired scale for the
		calculations.
		CO4: describe about the waste management of the
		laboratory as this topic is very crucial from
		environmental safety point of view.
	S	EMESTER-III
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
CH -511	Applications of	Students, after this course will be able to:
	Spectroscopy	CO1: describe the basic principles, spectral parameters
		and spectrum display in Electron Spin Resonance
		(ESR) Spectroscopy and NMR of paramagnetic substances in solutions.
		274

		CO2: explain about Mossbauer Spectroscopy and its
		Applications in studying Various iron and tin
		compounds.
		CO3: explain about the Microwave, Ultraviolet and
		Visible Spectroscopy and Vibrational
		Spectroscopy. Instrumentation and sample
		handling for these spectroscopies.
		CO4: compare between first order and second order
		spectra in NMR spectroscopy.
		CO5: describe the basic and fundamental aspects of
		Mass spectrometry and ¹³ C NMR.
CH -512	Organo transition Metal	Students, after this course, will be able to:
	Chemistry	CO1: describe the various compounds of Transition
		Metal-Carbon Multiple Bonds and Transition
		Metal Compounds with Bonds to Hydrogen.
		CO2: describe the chemistry of Transition Metal
		Complexes along with Alkyls and Aryls of
		Transition Metals.
		CO3: explain about Transition Metal Complexes with
		unsaturated Organic molecules and reactions
		relating to nucleophilic and electrophilic attack
		on ligands in organic synthesis.
		CO4: describe the basics and applications of fluxional
		organometallic compounds and Homogeneous
		Catalysis.
		CO5: describe about Homogeneous Catalysis,
		Stoichiometric reaction for catalysis,
		homogeneous catalytic hydrogenation related
		concepts.
CH -513	Heterocyclic Chemistry	Students, after this course will be able to:
		CO1: state the Nomenclature of Heterocycles using
		Hantzsch-widman System.
		CO2: explain about Chemical behavior of Aromatic and
		non-aromatic Heterocycles utilizing information

		from Spectra empirical resonance energy,
		delocalization energy and Dewar resonance
		energy.
		CO3: do synthesis of five, six and seven-membered
		heterocycles.
		CO4: do classification, chemistry and applications of
		some important meso-ionic heterocycles and
		azoles.
		CO5: do practicals for various heterocyclic and
		photochemical conversions.
CH -514	Environmental Chemistry	Students, after this course will be able to:
		CO1: explain about the composition of atmosphere and
		Biogeochemical cycles of C,N,P,S and O. CO2: describe the concepts of Environmental
		Toxicology and Chemical solutions to
		environmental problems for better industrial
		processes. Students will know about the tragic
		accidents occurred in the past.
		CO3: explain about the chemistry of Industrial
		Pollution, Soils and Hydrosphere.
		CO4: demonstrate the Chemical and photochemical
		reactions in atmosphere responsible for Ozone
		depletion, Global warming, Green house effect
		and acid rain.
CH -515	Laboratory Course	Students, after this course, will be able to:
	Inorganic Chemistry	CO1: estimate various cations and anions using
		Colorimetric methods.
		CO2: use Separation techniques such as Ion exchange,
		Solvent extraction, Column and paper
		chromatography.
CH -516	Laboratory Course	Students, after this course will be able to:
	Organic Chemistry	CO1: prepare various organic compounds.
		CO2: explain TLC, column chromatography and paper
		chromatography for organic mixture.

CH -517	Laboratory Course Physical Chemistry	Students, after this course will be able to: CO1: measure conductance, equivalent conductance and degree of dissociation of various acids, bases and their mixtures. CO2: compare the strengths of two acids and kinetics of salts by employing Chemical kinetics.
		CO3: determine the equilibrium constant by distribution method.
		CO4: calculate critical solution temperature of various
		Polar and non-polar mixtures.
	S	EMESTER-IV
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
CH -521	Biophysical chemistry	Students, after this course will be able to: CO1: explain about the DNA and RNA in living systems. CO2: describe about the enzymes and their nomenclature and types. Also the mechanism of the enzyme action will be explained using Fischer's lock and key and Koshland's induced fit hypothesis. CO3: describe about the type of Reactions Catalyzed by Enzymes and co-enzymes concepts. CO4: explain about biological macromolecules and their interactions including their structural properties. CO5: describe about the separation and characterization methods of macromolecules ATP cycles and concepts of nucleic acids. CO6: state about Thermodynamics of Biopolymer Solutions including osmotic pressure, membrane

		equilibrium, muscular contraction.
CH -522	Organic Synthesis - I	Students, after this course will be able to: CO1: explain about Organometallic Reagents and various types of synthesis including Cram's Rule, Felkin-Ahn Model. CO2: describe various oxidative and reductive processes for Hydrocarbons, Carbonyl compounds and alcohols. CO3: describe general mechanistic considerations- nature of migration, migratory aptitude and rearrangements.
CH -523	Chemistry of Natural Products	Students, after this course, will be able to: CO1: describe about the classification, nomenclature, occurrence isolation of terpenoids and carotenoids. CO2: describe the general methods of structure determination for alkaloids, terpenoids and carotenoids. CO3: explain about the occurrence and basic skeleton of steroids including synthesis and Biosynthesis of Steroids. CO4: describe about the nomenclature and general methods of structure determinations of plant pigments, porphyrins and Prostaglandins.
CH -524	Photo Chemistry and Solid State Chemistry	Students, after this course, will be able to: CO1: explain the Photochemistry of Photochemical Reactions and the determination of reaction mechanism. CO2: describe the Photochemistry of alkenes, carbonyl and aromatic compounds and their miscellaneous reactions. CO3: describe the solid state reactions and their properties like crystal defects and non-

		stochiometry and to know about electronic properties or band theory. CO4: describe Optical properties, Magnetic properties of materials and Quantum theory of paramagnetics.
СН -525	Laboratory Course Inorganic Chemistry	Students, after this course, will be able to: CO1: analyze presence of residual chlorine, BOD, COD and hardness in water. CO2: find amperometric determination of Zn ⁺² with EDTA and Thiosulphate with iodine. CO3: describe different Oxidation-Reduction, precipitation titrations. CO4: describe about reactions involving oxidation and reduction processes involving iodine.
CH -526	Laboratory Course Organic Chemistry	Students, after this course, will be able to: CO1: explain about extraction of organic compound from natural sources. CO2: determine the saponification & iodine values of oils and fats. CO3: describe about the Fehling's method. CO4: determine estimation of formaldehyde and glycin.
CH -527	Laboratory Course Inorganic Chemistry	Students, after this course, will be able to: CO1: describe about Current Potential Relationships and analysis of Spectro-photometric technique. CO2: state about techniques such as colorimetry, refractometry and Chromatography. CO3: analyze data on a computer for all experiments.

BACHELOR OF LIBRARY AND INFORMATION SCIENCE

PROGRAM OUTCOMES (POs)	The designing of the Library & Information Science
	programme is to provide the organization of knowledge,
	processing of the knowledge, dissemination of
	information, automation of library, networking,

communication technology, management techniques in organization of library informatics centers, thus also provide hands on practice on different types of information, source and services, aware about different types of e- resources and their use, use of advanced version of technology in library operations, aware about various consortia and consortia- based resources to prepare students for careers as professionals in the field of library Information science. The completion of the course will enable the student to:

PO1: respond to the changing information needs of society.

PO2: apply the basic principles and theories of Library and Information Science.

PO3: develop proficiencies and abilities of students essential for management of Libraries and Information Systems.

PO4: describe the role of Libraries and Information Centers in socio-economic development of the society.

PO5: apply Information and Communication Technology in Libraries and Information Centers.

PO6: recall the broad range of disciplines of library information science.

PO7: get skilled in knowledge organization and techniques.

PO8: interpret various types of libraries, sources and services, personality development and communication skills, information resource development, intellectual property rights and copyright knowledge management, information literacy and management.

PROGRAM SPECIFIC OUTCOMES (PSOs)

Curriculum of Library & Information Science prepares graduates to gain the following programme specific outcomes:

PSO1: Ability to design or develop the students with

librarianship. PSO2: An ability to practice or apply the library skills, communication skills in a wide range of academic, institutions and professional employment areas. PSO3: To display critical thinking for creating new ideas and design innovative pathways. PSO4: Demonstrate the knowledge in his/her professional activities.
skills, communication skills in a wide range of academic, institutions and professional employment areas. PSO3: To display critical thinking for creating new ideas and design innovative pathways. PSO4: Demonstrate the knowledge in his/her
of academic, institutions and professional employment areas. PSO3: To display critical thinking for creating new ideas and design innovative pathways. PSO4: Demonstrate the knowledge in his/her
employment areas. PSO3: To display critical thinking for creating new ideas and design innovative pathways. PSO4: Demonstrate the knowledge in his/her
PSO3: To display critical thinking for creating new ideas and design innovative pathways. PSO4: Demonstrate the knowledge in his/her
ideas and design innovative pathways. PSO4: Demonstrate the knowledge in his/her
PSO4: Demonstrate the knowledge in his/her
professional activities.
PSO5: Display his/her true potential and get
appropriate endorsement through qualifying
competitive examinations i.e. All Academic
Libraries, Railways Libraries, Bank
Libraries and Parliament Libraries etc.
PSO6: Acquire the ability to engage in self-
determining and life- long learning in the
broadest context of socio- technological
changes in the library information center.

COURSE OUTCOMES (COs)

COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES
		SEMESTER-I
BLIS 01	Foundation of Library and Information Science	After completion of this course, the student will be able to:
		CO1: describe the definition, history and purpose of
		the library.
		CO2: recall the role of professional associations and
		the standard professional ethics of
		librarianship.
		CO3: state the types of libraries and their functions.
		CO4: explain the fundamental laws, legislations and
		associations. The role of libraries in modern
		society and global library developments.

		CO5: commit to state the individual, institutional,
		society and professional responsibility.
		CO6: apply the concept of resource sharing,
		financial management of different types of
		libraries.
BLIS 02	Knowledge Organization:	The outcome of this course is that the student after completion of the course will be able to:
	Classification (Theory)	CO1: describe the basic concept of organisation of
		knowledge.
		CO2: differentiate between the various library
		classification schemes.
		CO3: explain why and how to develop knowledge
		organization systems.
		CO4: relate the theory and practices involved in
		library classification.
		CO5: classify the library schemes and the follow the
		trends in classification.
		CO6: work in libraries, information centres and
		other organizations that organize large bodies
		of recorded information.
		CO7: apply the principle of book classification.
BLIS 03	Knowledge Organisation:	After completion of this course the student will be able to:
	Cataloguing (Theory)	CO1: apply the concept of cataloguing and the
		functions of library catalogues.
		CO2: develop knowledge organization systems.
		CO3: apply the knowledge for organization systems
		and approaches.
		CO4: apply principles and theories of library
		cataloguing.
		CO5: follow the cataloguing rules of CCC and
		AACR.
		CO6: follow the various standards available and
		used in cataloguing.

		CO7: apply the concept of authority control and to be able to select main and added entries.
BLIS 04	Information and Communication Technology: Basics	The outcome of this course is that the student after completion of the course will be able to: CO1: apply the basics of information

	SEMESTER-II		
COURSE CODE	NAME OF THE COURSE	COURSE OUTCOMES	
BLIS 05	Management of Library and Information Centers	After completion of this course, the student will be able to: CO1: perform the basic housekeeping operations, prepare budget documents and perform the stock verification.	

		CO2: apply the basics of collection management and
		Human resource management.
		CO3: apply the fundamentals of management, frame
		policies and process of libraries and perform
		routine activities of libraries.
		CO4: use the management techniques in
		organization of library & information centers.
		CO5: manage the library & information centers
		effectively.
		CO6: describe the terminology of management with
		its related terminology as applied to libraries
		and information centers.
		CO7: recall the different schools of thought.
		CO8: identify the fundamental components of
		management, planning, organizing, staffing,
		directing and control.
		CO9: identify the main approaches to the study of
		the management of an organization.
		CO10: show skills in managing resources, money,
		people and time and demonstrate
		management skill in libraries and information
		centers.
BLIS 06	Knowledge Organisation:	After completion of this course, the student will be able to:
	Classification (Practice)	CO1: explain the skills in classification.
	(Tractice)	CO2: determine and classify library resources by
		using scheme of classification-DDC and CC.
		CO3: apply the principles of how-to-do methods on
		building up class numbers.
		CO4: use the knowledge of two classification
		schemes: Dewey Decimal Classification and
		Colon Classification.
		CO5: describe about the schedules, the rule books
		and also the number building process.
		CO6: observe, correct, and to check the workouts of
		the students till arrive at the desired class
		284

		number.
BLIS 07	Knowledge Organisation: Cataloguing (Practice)	After completion of this course the student will be able to: CO1: prepare various catalogue entries for simple, complex, various authorships, editorial publications, serial publications and corporate body authored documents. CO2: show their cataloguing skills for various library resources according to AACR-II. CO3: assign subject headings using Sear's list Subject Headings. CO4: perform cataloguing of books. CO5: perform cataloguing of journals. CO6: apply their knowledge regarding e-books and e-journals. CO7: do cataloguing of non-book material.
BLIS 08	Information Sources and Services (Theory)	After completion of this course, the student will be able to: CO1: apply the broad range of information sources and services available in various subject areas. CO2: evaluate and suggest authentic and useful information sources to library users. CO3: provide reference services to users of a library. CO4: critically analyse and evaluate the information sources. CO5: state the requirements and step-by-step Process for handling their information queries. CO6: describe the various Internet resources in the areas of Science and Technology, Social Sciences and Humanities. CO7: apply their knowledge in retrieving databases and on-line /web information resources in network environment.

technology. CO5: state the various aspects of computer hardware and software.	BLIS 09	Information and Communication Technology (Practical)	
--	---------	--	--

POST GRADUATE DIPLOMA OF COMPUTER APPLICATION (P.G.D.C.A.)

PROGRAMME OUTCOMES (POs)	At the end of the one-year P.G.D.C.A. programme the students will be able to:
	PO1: design, develop applications in Information Technology.
	PO2: use the latest trends in various subjects of computers & information technology.
	PO3: use their knowledge in solving challenges in data and resource protection and computer software security.
	PO4: use IT application in real life.
	PO5: describe the basic computer technology concepts
	and information technology applications.
	PO6: Design and develop applications to analyze
	and solve all computer science related
	problems.

PROGRAM SPECIFIC OUTCOMES (PSOs)	At the end of the one-year PGDCA programme the students will be able to:
	PSO1: use open-source technologies and can seek
	appropriate opportunity in trade and industry.

PSO2: provide socially acceptable technical solutions to real world problems with the application of modern and appropriate programming techniques.
PSO3: design applications for any desired needs with
appropriate considerations for any specific need
related to societal and industrial aspects.
PSO4: find a job very easily in the present job market.
PSO5: undertake Master Programme and for designing
small business application software as per the
need of industry and real world.

COURSE OUTCOMES (COs)

SEMESTER – I		
COURSE CODE	COURSE NAME	COURSE OUTCOMES
PGDCA-1101	Computer Fundamentals	After completing this course, the students will be able to: CO1: describe about the types of computer, peripheral devices, memory management, multimedia and number system. CO2: use various input and output devices. CO3: state about binary number representation along with its operations.
		CO4: recall the theoretical framework of internet and associated application of the internet. CO5: use the computers for business, education and society.
PGDCA-1102	Computer Programming using C	At the end of the course, the students will be able to: CO1: use the various concepts of programming language. CO2: develop logics and analytical ability to solve problem. CO3: apply the procedural programming using functions. CO4: use various storage classes along with user

		defined data types.
		CO5: use various flow control statements and do
		file handling.
		CO6: apply the concept of functional hierarchical
		code organization.
		CO7: work with arrays of complex structure data
		types.
PGDCA-1103	Database Management	Students, after the completion of the course, will be
	System	able to:
		CO1: describe the various features and applications
		of Database Management system.
		CO2: use database languages (DDL, DML, DCL)
		CO3: design a database by using different data
		models.
		CO4: apply their knowledge in the database
		handling during execution of the transactions
		along with concurrent access.
		CO5: perform various types of SQL queries.
		CO6: design a good database using normalization,
		decomposition and functional dependency.
PGDCA-1104	Data Communication	The students, after this course, will be able to:
	and Networks	CO1: explain the functions of different layers of
		TCP/IP and OSI reference models.
		CO2: classify the networks as LAN, MAN and WAN.
		CO3: identify the various techniques and modes of
		transmission media with real time applications.
		CO4: apply the fundamentals of Network security.
PGDCA- PR-	Lab 1 (Based on PGD-	The students, after this course, will be able to:
1105	1101 & PGD- 1102)	CO1: illustrate flowchart and algorithm to the given
		problem.
		CO 2: describe the basic Structure of the C-
		programming, declaration and usage of
		variables.
		CO 3: write C programs using operators.
		CO 4: write C programs using Pointers to access
		788

		arrays, strings and functions. CO 5: exercise user defined data types Program with pointers and arrays, perform pointer arithmetic, and use the pre-processor, the students will be able to develop applications
PGDCA-PR- 1106	Lab 2 (based on PGD-1103)	The students, after this course, will be able to: CO1: design and create relational database systems. CO2: execute advanced queries such as relational constraints, joins, set operations, aggregate functions, trigger, views and embedded SQL. CO3: use various softwares to design and build ER Diagrams, UML, Flow chart for related database systems.

	SE	MESTER - II
COURSE CODE	COURSE NAME	COURSE OUTCOMES
PGDCA-2101	Object Oriented Concepts using JAVA	The students, after this course, will be able to: CO1: use object oriented programming concepts to solve real world problems. CO2: explain the concept of class and objects with access control to represent real world entities. CO3: demonstrate the behavior of programs involving the basic programming constructs like control structures, constructors, string handling and garbage collection CO4: use overloading methodology on methods and constructors to develop application programs. CO5: demonstrate the implementation of inheritance (multilevel, hierarchical and multiple) by using extend and implement keywords. 6. Describe the concept of interface and abstract classes

		to
		define generic classes.
		CO6: use multithreading concepts to develop inter
		process communication and implement
		concepts on file streams and operations in java
		programming for a given application
		programs.
		CO7: describe the backend connectivity process in
		java program by using JDBC drivers and
		develop java application to interact with
		database by using relevant software
		component (JDBC Driver).
PGDCA-2102	Web Technologies	The students, after this course, will be able to:
		CO1: develop web pages using HTML and
		Cascading Style Sheets.
		CO2: create XML documents and Schemas.
		CO3: build dynamic webpages using client-side
		(JavaScript) and server-side scripting (PHP,
		ASP.NET) languages.
		CO4: use Web Application Terminologies, Internet
		Tools, E – Commerce and other web services.
PGDCA-2103	Software Engineering	The students, after this course, will be able to:
		CO1: describe pre-requisites for planning a
		software project.
		CO2: design and test the software.
		CO3: explain concept of software engineering and
		its relevance.
		CO4: use the various methods or models for
		developing a software product.
		CO5: analyze existing system to gather
		requirements for proposed system.
PGDCA-2104	Computing Based	The students, after this course, will be able to:
	Accounting	CO1: use Tally for accounting purpose.
		CO2: demonstrate and understand accounting

		theory.
		CO3: apply accounting procedures using specialized computer accounting software. CO4: communicate effectively using standard accounting terminology. CO5: demonstrate an understanding of accounting reports and records.
PGDCA- PR- 2105	Lab 3 (Based on PGD-2101)	The students, after this course, will be able to: CO1: write programs for solving real world problems using java collection frame work. CO2: write programs using abstract classes. CO3: write multithreaded programs. CO4: write GUI programs using swing controls in Java. CO5: demonstrate the behavior of programs involving the basic programming constructs like control structures, constructors, string handling and garbage collection. CO6: use overloading methodology on methods and constructors to develop application programs. CO7: demonstrate the implementation of inheritance (multilevel, hierarchical and multiple) by using extend and implement keywords.
PGDCA-PR- 2106	Lab 4 (Based on PGD- 2102)	The students, after this course, will be able to: CO1: write valid and concise code for web pages. CO2: create web elements like buttons, banners. CO3: design Forms and validations for the website. CO4: write and debug webpage using HTML and DHTML languages. CO5: make use of knowledge related to links, addresses, images, and tables. CO6: use various formatting options on HTML

PGDCA-PR- 2107 Project Work: Project will involve Development of Business Application/Website Project Work: Project will involve Development of Business Application/Website CO2: design an Online Project with advanced technologies of their choice.		page and website.
CO3: develop a project professionally. CO4: prepare a SRS report. CO5: develop good presentation skills.	 will involve Development of Business	The students, after this course, will be able to: CO1: demonstrate a sound technical knowledge of their selected project topic. CO2: design an Online Project with advanced technologies of their choice. CO3: develop a project professionally. CO4: prepare a SRS report.