

SCHEME & SYLLABUS

B.A. (Honours/ Honours with Research)

Four Year Under-Graduate (FYUG) Programme as per NEP

Choice Based Credit System Semester Scheme with Multiple Entry and Exit Options in the

Undergraduate and Post-graduate Degree Programmes

Programme Code: UG011

(Academic Session 2024-25 onwards)



(Choice Based Credit System)

University Institute of Humanities
Sant Baba Bhag Singh University
2024

ABOUT THE DEPARTMENT

Sant Baba Bhag Singh University is an institution of excellence, recognized for the academic caliber and versatility of its educational programme worldwide. The Department of Humanities with its excellent faculty in Economics, Languages, History, Political Science and Music contributes to this excellence. Department of Humanities is created to pursue teaching and research in Punjabi Language and Literature, English Language and Literature, History and other subjects. SBBSUIH regards knowledge of Humanities and Arts as the core value. Inspired by the vision and values, this department offers a wide range of courses to the students of Humanities and Arts, runs the vibrant M. Phil& Ph.D. programs in Punjabi, English, History and Economics. Our purpose is to contribute for expanding the frontiers of knowledge in Humanities and Arts.

SALIENT FEATURES OF THE DEPARTMENT

- ❖ At SBBS University the focus of Department is on conducting innovative teaching, fundamental multidisciplinary research in humanities.
- ❖ Research oriented curriculum designed to enable students to acquire all the skills needed to collect and analyze the data.
- ❖ The Institute drawing upon its strength of highly qualified well-trained faculty, state-of-art, infrastructure and innovative teaching methodology.
- ❖ An Elective subject develops student's ability in understanding different forms of literary theory.
- ❖ Humanities teaches us the basic ethics of human values and psychology with references to all the aspects of the relevant area /subjects.
- ❖ With the latest research prevalent in the specific field, the institute is furnished with various specialized language labs and area for practicing of performing arts.

BA (Bachelor of Arts)

BA is a pathway for the stream of Arts, Commerce, Medical and Non-Medical students of 10+2 to gain the expertise for the professions like- Teaching, Counsellor and consultant, Journalism, Accounts. The program is designed as an undergraduate course in liberal arts, to develop the ability for Subject Matter Experts, Historian, Content Writer and Language Expert etc. They can also pursue master's program (MA) in Punjabi, English and History after graduation.

VISION

The Department of Humanities, with the expansion of global knowledge of human concerns, helps in developing critical thinking and aesthetic aptitude through higher education and research.

MISSION

To prepare students as graduates for their successful career and to develop all aspects of their personality to make them good human beings. To provide students with an understanding of human behavior that will support their ability to adjust in multi-cultural society.

ELIGIBILITY CRITERIA

10+2 or its equivalent examination in any stream conducted by a recognized Board/ University/Council

DURATION

4 Years

CAREER PATHWAYS

The program is designed to meet the growing requirement of qualified professionals in field of Teaching, Banking, Research and Learning. BA graduates are hired both by Government and private organizations. They can also take up their career as Politicians and Social Workers. On the basis of Arts they are able to join their Post-Graduation Courses further.

- **Government Jobs**
Prepare students for various government jobs such as Civil Services, banking sector etc. Many government Banks, Business Houses, Consultancies, Educational Institutes are hiring BA students.
- **Private Jobs:** Multiple pathways designed according to the level of the students to prepare them for different job profiles as per needs of industrial and media sector.
- **Higher Studies:** This pathway prepares students for Higher Studies and helps in their research also.
- **Entrepreneurship:** To set up new ventures. They can open up their own Teaching & Learning Institute

National Higher Education Qualifications Framework (NHEQF)

The National Education Policy (NEP) 2020 emphasizes the importance of higher education in promoting human and societal well-being, sustainable livelihoods, and economic development. It proposes the formulation of expected learning outcomes for all higher education programs, a National Higher Education Qualifications Framework (NHEQF) to integrate vocational education, and facilitative norms for issues like credit transfer and equivalence.

The NHEQF levels represent a series of sequential stages expressed in terms of a range of learning outcomes against which typical qualifications are positioned/located. NHEQF level 4.5 represents learning outcomes appropriate to the first year (first two semesters) of the undergraduate programme of study, while Level 8 represents learning outcomes appropriate to the doctoral-level programme of study.

Higher education qualifications at different levels on the NHEQF

NHEQF level	Examples of higher education qualifications located within each level
Level 4.5	Undergraduate Certificate. Programme duration: First year (first two semesters) of the undergraduate programme, followed by an exit 4-credit skills-enhancement course(s).
Level 5	Undergraduate Diploma. Programme duration: First two years (first four semesters) of the undergraduate programme, followed by an exit 4-credit skillsenhancement course(s) lasting two months.
Level 5.5	Bachelor's Degree. Programme duration: First three years (Six semesters) of the four-year undergraduate programme.
Level 6	Bachelor's Degree (Honours/ Honours with Research). Programme duration: Four years (eight semesters). Level 6 Post-Graduate Diploma. Programme duration: One year (two semesters) for those who exit after successful completion of the first year (two semesters) of the 2-year master's programme.
Level 6.5	Master's degree. (e.g. M.A., M.Com., M.Sc., etc.) Programme duration: Two years (four semesters) after obtaining a 3- year Bachelor's degree (e.g. B.A., B.Sc., B.Com. etc.).
Level 6.5	Master's degree. (e.g. M.A., M.Com., M.Sc., etc.) Programme duration: One year (two semesters) after obtaining a 4 -year Bachelor's degree (Honours/ Honours with Research) (e.g. B.A., B.Sc., B.Com. etc.).
Level 7	Master's degree.(e.g. M.E./M.Tech. etc.) Programme duration: Two years (four semesters) after obtaining a 4-year Bachelor's degree. (e.g. B.E./B.Tech. etc.)
Level 8	Doctoral Degree

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PROGRAMME EDUCATIONAL OBJECTIVE (PEO)

PEO1: The Student will be capable of ethical responsibility and work for the betterment of the society.

PEO2: Student will learn to engage with texts and works of art by learning and practicing methods of close reading, careful analysis and critical thinking.

PEO3: Student will develop their abilities in different forms of communication, formulating optimistic opinions and applying concepts to a real-world context.

PEO4: Student will develop a sensibility and understanding to be proactive as a responsible global citizen.

PROGRAMME OUTCOMES (PO)

PO1: To comprehend human behavior that will support their ability to participate as informed members of the society, and will be able to develop an empathetic outlook towards others and their surroundings.

PO2: To function effectively in teams and individually to accomplish a common goal.

PO3: To understand professional, ethical, legal, security and social issues and responsibilities.

PO4: To develop a multidisciplinary approach that will help them to build their social analytical skills and in pursuing multitasking courses and profession.

PO 5: Students will be able to understand specialised areas and explain major concepts in the languages/ social sciences and its applications.

PO6: Critical thinking as an attribute enables a student to identify, formulate and analyze a complex variety of problems in humanities.

PO7: Student will be able to demonstrate the ability to read, understand, and critically review the concepts and information.

PO8: Students will be able to motivate and communicate the knowledge in oral and written form accurately using an appropriate communication style.

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1: Specify the level, criterion, or standard for the knowledge, skill, ability, or disposition that the student must demonstrate

PSO2: Students with this course can go for higher education towards development studies that are restructured.

PSO3: Provide a fundamental knowledge to develop an aesthetic appreciation for fine arts.

PSO4: Students will develop thinking ability to consider different concerns from a global perspective.

Salient Features of the Four Years Multidisciplinary Undergraduate Programmes with Multiple Entry and Exit Options (Four-Year Choice Based Credit System Semester Scheme)

1. The Undergraduate (UG) degree programmes of either 3 or 4-year duration, shall be structured in a semester mode with multiple exit options with the followings with multiple entry and exit points and re-entry options, with appropriate certifications such as:
 - a) Certification (UG Certificate) at the completion of first year (1 year = 2 semesters)
 - b) Diploma (UG Diploma) at the completion of second year (2 years = 4 semesters)
 - c) Bachelor's Degree at the completion of third year (3 years = 6 semesters)
2. The candidate who completes the four years Undergraduate Program, either in one stretch or through multiple exits and reentries (within the stipulated maximum period of seven years) would get a Bachelor's degree with Honours or Research. For example:
 - a) Bachelor's Degree (Honours) at the completion of fourth year (4 years = 8 semesters)
 - b) Bachelor's Degree (Honours with Research) at the completion of fourth year (4 years = 8 semesters)
3. The four years undergraduate Honours degree holders with a research component and a suitable grade are eligible to enter the
 - Ph.D. (Doctoral) Programme in a relevant discipline or
 - Two Semester Master's Degree programme with project/research work
4. Candidates who wish to enter the master's/doctoral programme in a discipline other than the major discipline studied at the undergraduate programmes, have to take additional courses in the new discipline to meet the requirement or to make up the gap between the requirement and the courses already studied.
5. There may be parallel five years integrated master's degree programmes with exit options at the completion of third and fourth years, with the undergraduate degree and undergraduate degree with honours in a discipline, respectively.
6. There may also be an integrated doctoral programme with an exit option at the end of the first year with the Master's degree.
7. The students who exit with Certification, Diploma and Basic Bachelor Degree shall be eligible to re-enter the programme at the exit level to complete the programme or to complete the next level.
8. The areas of specialization which the students are required to choose are either two disciplines/subjects or a discipline called 'major course'. Students gain deep disciplinary knowledge through theory and practical experiences in their area of specialization (major). Students should secure the prescribed number of credits (about 50% of total credits) through core courses in the major discipline.
9. The areas of additional discipline which the students are required to choose are called 'minor course'. Students gain a reasonable understanding of the area of additional study (minor) that they choose.

10. The students may study two disciplines at the same level or breadth up to the sixth semester and choose one of them for study in the fourth year to obtain the Honours degree in that discipline. A student who wishes to get dual honours degrees may repeat the fourth year of the program in the second discipline.
11. The students may choose one discipline and vocational subject or Teacher Education for their study in the undergraduate program. This will enable them to get an Honours degree either in the discipline or in the vocational subject/ Teacher Education or both,in the discipline and in the vocational subject/ Teacher Education.
12. Students shall be given options to choose courses from a basket of courses being offering.

ABOUT THE CHOICE BASED CREDIT SYSTEM (CBCS)

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill-based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. The basic idea is to look into the needs of the students so as to keep up-to-date with development of higher education in India and abroad. CBCS aims to redefine the curriculum keeping pace with the liberalization and globalization in education. CBCS allows students an easy mode of mobility to various educational institutions spread across the world along with the facility of transfer of credits earned by students.

1. Curriculum Structure: BA degree programme will have a curriculum with Syllabi consisting of following type of courses:

I. Ability Enhancement Courses (AEC): The Ability Enhancement Courses (AEC) may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). AECC courses are the courses based upon the content that leads to Knowledge enhancement; these are mandatory for all disciplines.

SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

A. Ability Enhancement Compulsory Courses (AECC): Environmental Science, English Communication/MIL Communication.

B. Skill Enhancement Courses (SEC): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge.

II. Core Courses (CR): A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course. These courses are employability enhancement courses

relevant to the chosen program of study. Program core comprises of Theory, Practical, Project, Seminar etc. Project work is considered as a special course involving application of knowledge in solving/ analyzing/exploring a real-life situation/ difficult problem.

III. Elective Courses: Elective course is generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or with provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill. Accordingly, elective course may be categorizing as:

- A. Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective.
- B. Project (I): An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.

2. NOMENCLATURE USED:

- A. Graduate Core Courses
 - i. Core Course (CR)
 - ii. Theory Subject (T)
 - iii. Practical (P)
- B. Ability Enhancement Courses (AEC):
 - i. Ability Enhancement Compulsory Courses (AECC)
 - ii. Skill Enhancement Courses (SEC).
- C. Elective Courses (EL)
 - i. Discipline Specific Elective (DSE)



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B.A. First Semester								
Sr. No.	Course Type	Course Category	Course Code	Course Name	Teaching Scheme			
					Contact Hours	Credits	Total Contact Hours	
					(L:T:P)	(L:T:P)	Total Credits Hours	
1	Major/ Minor	DSE-I		Major Core Course-I	4:0:0	4:0:0	4	4
2	Major/ Minor	DSE-II		Major Core Course-I	4:0:0	4:0:0	4	4
3	Major/ Minor	DSE-III		Major Core Course-I	4:0:0	4:0:0	4	4
4	MDC	MDC-I		Multi-Disciplinary Course-I	3:0:0	3:0:0	3	3
5	VAC	VAC-I		Value Added Course-I	3:0:0	3:0:0	3	3
6	AEC	AEC-I		Ability Enhancement Course-I	2:0:0	2:0:0	2	2
7	PT	PT	PT161	NSO	0:0:2	0:0:0	2	NC
			PT163	NCC	0:0:2	0:0:0	2	NC
			PT165	NSS	0:0:2	0:0:0	2	NC

Major/Minor Core Course (Theory)

S. No.	Course Category	Course Code	Course Name				
1	DSE	HIS161	History-I(History Of Ancient India upto 1000 A.D.)	4:0:0	4:0:0	4	4
2	DSE	PLS161	Political Science-I(Introduction to Political Theory)	4:0:0	4:0:0	4	4
3	DSE	PED167	Physical Education-I (Theory)	3:0:0	3:0:0	3	3
4	DSE	ENG161	Elective English-I (Language and Literature-I)	4:0:0	4:0:0	4	4
5	DSE	PBI161	Elective Punjabi-I (ਪੰਜਾਬੀ ਸਾਹਿਤ ਅਤੇ ਭਾਸ਼ਾ-I)	4:0:0	4:0:0	4	4
6	DSE	MUC161	Music Vocal -I (Theory)	2:0:0	2:0:0	2	2
7	DSE	ECO161	Economics-I (Micro Economics)	4:0:0	4:0:0	4	4
8	DSE	MAT161	Mathematics-I (Calculus)	4:0:0	4:0:0	4	4
9	DSE	GEO161	Geography-I (Physical Geography)	3:0:0	3:0:0	3	3

Major/Minor Core Course (Practical)

1	DSE	PED169	Physical Education-I (Practical)	0:0:2	0:0:1	2	1
2	DSE	MUC163	Music Vocal-I (Practical)	0:0:4	0:0:2	4	2
3	DSE	GEO163	Geography-I(Practical)	0:0:2	0:0:1	2	1

Minimum Contact Hours Required: 22

Minimum Credit Required: 20

Program Code: UG011

B.A. Second Semester								
Sr. No.	Course Type	Course Category	Course Code	Course Name	Teaching Scheme			
					Contact Hours	Credits	Total Contact Hours	
					(L:T:P)	(L:T:P)	Total Credits Hours	
1	Major/ Minor	DSE-IV		Major Core Course-II	4:0:0	4:0:0	4	4
2	Major/ Minor	DSE-V		Major Core Course-II	4:0:0	4:0:0	4	4
3	Major/ Minor	DSE-VI		Major Core Course-II	4:0:0	4:0:0	4	4
4	MDC	MDC-I		Skill Enhancement Course-I	3:0:0	3:0:0	3	3
5	VAC	VAC-II		Value Added Course-II	3:0:0	3:0:0	3	3
6	AEC	AEC-II		Ability Enhancement Course-II	2:0:0	2:0:0	2	2
7	PT	PT	PT162	NSO	0:0:2	0:0:0	2	NC
			PT164	NCC	0:0:2	0:0:0	2	NC
			PT166	NSS	0:0:2	0:0:0	2	NC

Major/Minor Core Course (Theory)

S. No.	Course Category	Course Code	Course Name				
1	DSE	HIS162	History-II(History of Medieval India 1000-1707 A.D.)	4:0:0	4:0:0	4	4
2	DSE	PLS162	Political Science-II(Political Theory:Concepts and Debates)	4:0:0	4:0:0	4	4
3	DSE	PED168	Physical Education-II(Theory)	3:0:0	3:0:0	3	3
4	DSE	ENG162	Elective English-II (Language and Literature-II)	4:0:0	4:0:0	4	4
5	DSE	PBI162	Elective Punjabi-II (ਪੰਜਾਬੀ ਸਾਹਿਤ ਅਤੇ ਭਾਸ਼ਾ-II)	4:0:0	4:0:0	4	4
6	DSE	MUC162	Music Vocal -II (Theory)	2:0:0	2:0:0	2	2
7	DSE	ECO162	Economics-II (Macro Economics)	4:0:0	4:0:0	4	4
8	DSE	MAT162	Mathematics-II (Ordinary Differential Equations)	4:0:0	4:0:0	4	4
9	DSE	GEO162	Geography-II (Climatology & Oceanography)	3:0:0	3:0:0	3	3

Major/Minor Core Course (Practical)

1	DSE	PED170	Physical Education-II (Practical)	0:0:2	0:0:1	2	1
2	DSE	MUC164	Music Vocal-II (Practical)	0:0:4	0:0:2	4	2
3	DSE	GEO164	Geography-II(Practical)	0:0:2	0:0:1	2	1

Minimum Contact Hours Required: 22

Minimum Credit Required: 20

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Sr. No.	Course Type	Course Category	Course Code	Course Name	Teaching Scheme			
					Contact Hours	Credits	Total Contact Hours	Total Credits Hours
					(L:T:P)	(L:T:P)		
1	Major	DSE-I		Major Core Course-III	4:0:0	4:0:0	4	4
2	Major	DSE-II		Major Core Course-III	4:0:0	4:0:0	4	4
3	Major	DSE-III		Major Core Course-III	4:0:0	4:0:0	4	4
4	Major	DSE-IV	IKS261		4:0:0	4:0:0	4	4
5	Minor	Minor*			4:0:0	4:0:0	4	4
6	Minor	Minor*			4:0:0	4:0:0	4	4
7	MDC	MDC-II		Multi-Disciplinary Course-II	3:0:0	3:0:0	3	3
8	SEC	SEC-II		Skill Enhancement Course-II	3:0:0	3:0:0	3	3
9	AEC	AEC-III		Ability Enhancement Course-III	2:0:0	2:0:0	2	2
10	PT	PT	PT261	NSO	0:0:2	0:0:0	2	NC
			PT263	NCC	0:0:2	0:0:0	2	NC
			PT265	NSS	0:0:2	0:0:0	2	NC

Major Core Course (Theory)

S. No.	Course Category	Course Code	Course Name					
1	Major	HIS261	History of Modern India A.D.1757-1857	4:0:0	4:0:0	4	4	
2	Major	PLS261	Political Science-III (Indian Political System)	4:0:0	4:0:0	4	4	
3	Major	PED267	Physical Education-III (Theory)	3:0:0	3:0:0	3	3	
4	Major	ENG261	Elective English-III (Language and Literature-III)	4:0:0	4:0:0	4	4	
5	Major	PBI261	Elective Punjabi-III (ਪੰਜਾਬੀ ਵਾਰਤਕ ਅਤੇ ਗਲਪ ਸਾਹਿਤ)	4:0:0	4:0:0	4	4	
6	Major	MUC261	Music Vocal -III (Theory)	2:0:0	2:0:0	2	2	
7	Major	ECO261	Economics-III (Indian economy)	4:0:0	4:0:0	4	4	
8	Major	MAT261	Mathematics-III	4:0:0	4:0:0	4	4	
9	Major	GEO261	Geography-III	3:0:0	3:0:0	3	3	

Major Core Course (Practical)

1	Major	PED269	Physical Education-III (Practical)	0:0:2	0:0:1	2	1
2	Major	MUC263	Music Vocal-III (Practical)	0:0:4	0:0:2	4	2
3	Major	GEO263	Geography-III (Practical)	0:0:2	0:0:1	2	1

Minor Core Course (Theory)

S. No.	Course Category	Course Code	Course Name					
1	Minor	ENG263	Literary Readings and Language Practice in English-I	4:0:0	4:0:0	4	4	
2	Minor	PBI263	ਪੰਜਾਬੀ ਗੱਦ ਸਾਹਿਤ	4:0:0	4:0:0	4	4	

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3	Minor	MUC265	Introduction to Indian Music Vocal-I	2:0:0	2:0:0	2	2
4	Minor	ECO263	Contemporary issues in India	4:0:0	4:0:0	4	4
5	Minor	GEO265	Natural Hazards and Disaster Management	4:0:0	4:0:0	4	4
6	Minor	HIS263	History of modern India	4:0:0	4:0:0	4	4

Minor Core Course (Practical)

1	Minor	MUC267	Introduction to Indian Music Vocal (Practical)	0:0:4	0:0:2	4	2
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* Minor courses will be other than from major courses

Minimum Contact Hours Required: 34

Minimum Credit Required: 32



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B.A. Fourth Semester								
Sr. No.	Course Type	Course Category	Course Code	Course Name	Teaching Scheme			
					Contact Hours	Credits	Total Contact Hours	
					(L:T:P)	(L:T:P)	Total Credits Hours	
1	Major	DSE-I		Major Core Course-IV	4:0:0	4:0:0	4	4
2	Major	DSE-II		Major Core Course-IV	4:0:0	4:0:0	4	4
3	Major	DSE-III		Major Core Course-IV	4:0:0	4:0:0	4	4
4	Major	DSE-IV	IKS262		4:0:0	4:0:0	4	4
5	Minor	Minor			4:0:0	4:0:0	4	4
6	Minor	Minor			4:0:0	4:0:0	4	4
7	MDC	MDC-III		Multi-Disciplinary Course-III	3:0:0	3:0:0	3	3
8	SEC	SEC-III		Skill Enhancement Course-III	3:0:0	3:0:0	3	3
9	AEC	AEC-IV		Ability Enhancement Course-III	2:0:0	2:0:0	2	2

Major/Minor Core Course (Theory)

S. No.	Course Category	Course Code	Course Name				
1	DSE	HIS262	History of the Punjab A.D.1469-1708	4:0:0	4:0:0	4	4
2	DSE	PLS262	Political Science-IV (Western Political Thought)	4:0:0	4:0:0	4	4
3	DSE	PED268	Physical Education-IV (Theory)	3:0:0	3:0:0	3	3
4	DSE	ENG262	Elective English-IV	4:0:0	4:0:0	4	4
5	DSE	PBI262	Elective Punjabi-IV (ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ)	4:0:0	4:0:0	4	4
6	DSE	MUC262	Music Vocal -IV (Theory)	2:0:0	2:0:0	2	2
7	DSE	ECO262	Economics-IV (Public Finance)	4:0:0	4:0:0	4	4
8	DSE	MAT262	Mathematics-IV	4:0:0	4:0:0	4	4
9	DSE	GEO262	Geography-IV	3:0:0	3:0:0	3	3

Major/Minor Core Course (Practical)

1	DSE	PED270	Physical Education-IV (Practical)	0:0:2	0:0:1	2	1
2	DSE	MUC264	Music Vocal-IV (Practical)	0:0:4	0:0:2	4	2
3	DSE	GEO264	Geography-IV (Practical)	0:0:2	0:0:1	2	1

Minor Core Course (Theory)

S. No.	Course Category	Course Code	Course Name				
1	Minor	ENG264	Literary Readings and Language Practice in English-II	4:0:0	4:0:0	4	4
2	Minor	PBI264	ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਸਾਹਿਤ	4:0:0	4:0:0	4	4
3	Minor	MUC266	Introduction to Indian Music Vocal-II	2:0:0	2:0:0	2	2

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4	Minor	ECO264	Fiscal Economics	4:0:0	4:0:0	4	4
5	Minor	GEO266	Natural Hazards and Disaster Management	4:0:0	4:0:0	4	4
6	Minor	HIS266	History of modern India	4:0:0	4:0:0	4	4

Minor Core Course (Practical)

1	Minor	MUC268	Introduction to Indian Music Vocal-II (Practical)	0:0:4	0:0:2	4	2
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Minimum Contact Hours Required: 32

Minimum Credit Required: 32





HISTORY OF ANCIENT INDIA UPTO 1000 A.D.

CourseCode	HIS161
Course Title	History-I (History Of Ancient India Upto 1000 A.D.)
Typeofcourse	Theory
LT P	4: 0:0
CourseObjectives(C O)	<ol style="list-style-type: none">1. The students will understand historical interpretation.2. The students will develop historical research skills (Critical Thinking, Verbal Literacy).3. The students will be able to communicate historical knowledge in written and oral forms (Critical Thinking, Verbal Literacy).
Course Outcomes	<p>The students are able to understand historical interpretation.</p> <ol style="list-style-type: none">1. Developed historical research skills like Critical Thinking, Verbal Literacy.2. Now the students are able to communicate historical knowledge in written and oral forms (Critical Thinking, Verbal Literacy).3. They introduced with important historical places of Ancient India on map.

UNIT-I

Major Sources of History: Literary Sources, Archaeological findings, Coins, Inscriptions and travel accounts.

The Indus Civilization: Origin and extent; Town-planning; Social and Economic Life, Religion; Causes of disintegration.

Vedic Age: Political and Economic Life, Social and Religious Life.

UNIT-II

Republics and Kingdoms 600-321 B.C.E.: Mahajanapadas, the rise of Magadha.

Jainism and Buddhism: Life and teachings of Mahavir Jain; Life and teachings of Gautam Buddha.

The Age of the Mauryas: Establishment of the Mauryan Empire; Central and Provincial Administration; Revenue; Judicial and local administration; Ashoka's Dhamma.

UNIT-III

The Kushanas: Kanishka and his achievements.

The Gupta Age: Establishment of the Gupta Empire; social, economic, cultural and scientific developments under Guptas.

The Rise of Southern Kingdoms: Administration under Pallavas; Rashtrakutas; Chalukyas.

UNIT-IV

Program Code: UG011

The Age of the Vardhanas: Administration under Harsha Vardhana; origin of Rajputs; South Indian States: Administration under Cholas; Taxation and trade under Pandavas.

Map: (a) Map on important historical places: Taxila, Indraprastha, Kannauj, Patliputra, Ujjain, Bodhgaya, Varanasi, Sopara, Ajanta, Ellora, Sanchi, Tanjor, Kanchipuram, Lothal, Nalanda, Hastinapur, Kalibangan, Harrappa, Kalinga, Arikamedu, Shravasti, Belgola.

(b) Mauryan Kingdom under Ashoka. Text and

Reference Books:

S.No.	Author(S)	Year	Title	Publisher
1	Arora A.C. & Sikri, S.L.	2009	Bharati Itihas Da Prachin Kal (Punjabi & Hindi)	Kalyani Publishers, Ludhiana



Course Code	PLS161
Course Title	Political Science-I (Introduction to Political Theory)
Course Type	Political Theory
L.P.T	4:0:0
Course Objectives	The course is introductory in nature and shall help students to understand the basic concepts in Political Theory. The conceptual understanding will smoothen their path towards the more advanced theoretical debates in Political Theory and Political Philosophy. Furthermore, the Field-work/Internship offers an opportunity to understand the working and nature of political institutions and processes.
Learning Outcome	<ol style="list-style-type: none">1. To introduce students to basic conceptual categories2. To make them familiar with the advanced theoretical debate in Political Theory & Political Philosophy3. To relate concepts to daily political practice4. To bridge gap between theory and practice of Political Science5. To enhance skill and job potential of students.

UNIT-I

Political Science: Meaning, Nature and Scope,

Relationship of Political Science with History, Economics Sociology.

Approaches of political science Traditional: Philosophical and Historical

Modern Approaches of political sciences: Behaviourism and Post Behaviourism

UNIT-II

What is Political Theory? Why do we need it?

State: Nature and Elements of state

State: Theories of its Origin:

Divine origin theory, Evolutionary theory and social contract theory.

UNIT-III

Perspectives on State: Liberal, Marxist and Gandhian

Welfare State Concept and Functions of Welfare State.

Laissez fair concept by Adam Smith

UNIT-IV

Sovereignty: Meaning ,Definition, Characteristic and Types of Sovereignty,

Theories of Sovereignty: Monistic and Pluralistic,

SUGGESTED READINGS'.

1. Bhargava, R. (2008) 'What is Political Theory', in Bhargava, R and Acharya, A. (eds.) Political Theory: An Introduction. New Delhi: Pearson.
2. Hoveyda Abbas, Ranajay Kumar**Political theory** Pearson Publications
3. Longman, Shorten, A. (2008) 'Nation and State', in McKinnon, C. (ed.) Issues in Political Theory, New York: Oxford University Press, pp. 33-55.
4. O.P.Gauba (2002), An Introduction to Political Theory, New Delhi, Macmillan..
5. Andrew Heywood (2002), Political Theory, New Delhi, Palgrave.
6. Chambers, C. (2008) 'Gender', in McKinnon, C. (ed.) Issues in Political Theory. New York: Oxford University Press, pp. 241-288.
7. Brighouse, H. (2008) 'Citizenship', in McKinnon, C. (ed.) Issues in Political Theory. New York: Oxford University Press, pp. 241-259.
8. J.C.Johari, Principles of Political Science Sterling Publishers, New Delhi.
9. A.C.Kapu r Principles of Political Science S. Chand & Company, New Delhi.
10. S.P. Verma Political Theory Geetanjali Publishing House, New Delhi
11. Andrew Hacker, Political Theory: Philosophy, Ideology & Science, Surjeet Publication (Indian Edition), 2006.
12. David Beetham, The Legitimation of Power: Issues in Political Theory, Macmillan, 1991.

PHYSICAL EDUCATION-I (THEORY)

Course Code	PED167
Course Title	Physical Education-I (Theory)
Type of Course	Theory
L T P	3:0:0
Course Objectives	<ol style="list-style-type: none"> 1. Gain knowledge about Body Types. 2. Understand the development of Physical Education in India. 3. They will be able to understand about Olympic Games, Commonwealth Games & Asian Games.
Course Outcomes	<p>After the completion of the course, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand the various theories of Physical Education. 2. Explain the aims and objectives of Physical Education. 3. Understand the Biological principles.

UNIT-I

Definition of the terms: Education, Physical Education, Physical Training and Coaching.

Aims and objectives of Physical Education, Relationship of Education and Physical Education.

UNIT-II

Biological Principles: Growth and Development, Age and sex differences

Effects of heredity and environment on growth and development.

Chronological age, physiological age, Anatomical age and Mental age.

Body types.

UNIT-III

Development of Physical Education and Sports in India. Pre-Independence, Post Independence

Sports Schemes in India, N.S.N.I.S., Sports Authority of India, Punjab Sports Department, Punjab State Sports Council.

UNIT-IV

Olympic Games: Ancient Olympics, Modern Olympics. Commonwealth Games and Asian Games.

Text-Books:

S. No.	Author(S)	Year	Title	Publisher
1	R.D. Kansal	2015	Physical Education and Sports	Kalyani Publishers Ludhiana

Reference Books:

S. No.	Author(S)	Year	Title	Publisher
1	Reverse, R.S	1978	Foundations of Physical Education Houghton Mifflin Co. Boston	Louis C.V.Mosby. C.
2	Bucher, C.S.	1968	Foundations of Physical Education	New York, Harper & Row
3	Singh Kanwaljeet and Singh Inderjeet	2000	Sports Sociology	Friends Publication, New Delhi, 2000.
4	Eraz Ahmad Khan	1996	History of Physical Education	Scientific Book Co., Patna-4, Latest Ed.
5	Singh Ajmer and Gill Jagtar	2004	Essentials of Physical Education and Olympic Movement	Kalyani Publishers, Ludhiana, 2004

Program Code: UG011

ENGLISH (ELECTIVE)-I

CourseCode	ENG161
CourseTitle	Elective English-I (Language and Literature-I)
Typeofcourse	Theory
LTP	4:0:0
Credits	4
Courseprerequisite	NA
Course Objectives(CO)	<ol style="list-style-type: none">1. Students will demonstrate familiarity with major poets, works and genres.2. Students will demonstrate the ability to read, write, and think critically.3. Students will use transcription conventions appropriately when transcribing words.

UNIT-I

The Doll's House by Henrik Ibsen—Completetext

UNIT-II

Spots of Time: Poems at serial No. 1-3, 5, 7-12, 14, 19-20

UNIT-III

Literary Terms: Ballad, Character, Comedy, Conceit, Epic, Irony, Plot, Paradox

UNIT-IV

Transcription of Words: comb, crèche, dose, gauge, ghost, castle, gross, mauve, sure, sample, wolf, wool, arch, off, of, door, stair, what, cough, clerk, tooth, yak, yawn, sing, tongue.

Texts & Recommended Books:

S.No.	Author(S)	Year	Title	Publisher
1	G.B.Shaw	2001	The Doll's House	Penguin/ Classics Edn.
2	M.H.Abrams	2008	Glossary of Literary Terms	Wadsworth CENGAGE Learning Publishers
3	J.D.O'Connor.	2008	Better Pronunciation of English	Wadsworth CENGAGE Learning Publishers

Elective Punjabi-I

Course Code	PBI161
Course Title	Elective Punjabi-I (ਪੰਜਾਬੀ ਸਾਹਿਤ ਅਤੇ ਭਾਸ਼ਾ-I)
Type of Course	Theory
L T P	4 0 0
Course Objectives(CO)	<p>ਵਿਦਿਆਰਥੀ ਨੂੰ:</p> <ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵੀਆਂ ਦੀ ਜੀਵਨੀ ਅਤੇ ਰਚਨਾਵਾਂ ਤੋਂ ਜਾਣ ਕਰਵਾਉਣਾ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਦੀ ਵਿਸ਼ੇਗਤ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਵੇਗੀ। ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਨਾਵਲ ਸਾਹਿਤ ਵਿਧਾ ਦਾ ਅਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਦਾ ਹੁਨਰ ਉਤਪੰਨ ਕਰਨਾ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਭਾਰਤੀ ਕਾਵਿ-ਸ਼ਾਸਤਰ ਬਾਰੇ ਜਾਗਰੂਕ ਕਰਨਾ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਅਰਥ ਆਧਾਰਿਤ ਸ਼ਬਦ ਵੰਨਗੀਆਂ ਨੂੰ ਸਮਝ ਕੇ ਸ਼ਬਦਾਂ ਦਾ ਸਹੀ ਇਸਤੇਮਾਲ ਕਰਨ ਲਈ ਯੋਗ ਬਣਾਉਣਾ।
Course Outcomes (CO)	<p>ਵਿਦਿਆਰਥੀ:</p> <ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰਨਗੇ। ਵਿਦਿਆਰਥੀ ਨਾਵਲ ਦੇ ਖੇਤਰ ਅਤੇ ਨਾਵਲ ਦੇ ਆਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਪ੍ਰਤੀ ਜਾਗਰੂਕ ਹੋ ਜਾਣਗੇ। ਵਿਦਿਆਰਥੀ ਭਾਰਤੀ ਕਾਵਿ ਸ਼ਾਸਤਰ ਦੇ ਨਿਯਮਾਂ ਅਤੇ ਵੱਖ-ਵੱਖ ਸੰਕਲਪਾਂ ਪ੍ਰਤੀ ਸੁਚੇਤ ਹੋ ਜਾਣਗੇ। ਵਿਦਿਆਰਥੀ ਅਰਥ ਆਧਾਰਿਤ ਵੰਨਗੀਆਂ ਨੂੰ ਸਮਝਦੇ ਹੋਏ ਆਪਣੇ ਅਕਾਦਮਿਕ ਖੇਤਰ ਵਿਚ ਇਹਨਾਂ ਦੀ ਸਹੀ ਵਰਤੋਂ ਕਰਨਾ ਸਿੱਖ ਜਾਣਗੇ।

ਭਾਗ -ਪਹਿਲਾ

ਸੁਖਨ ਦੇ ਸੂਰਜ (ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ ਸੰਗ੍ਰਹਿ:1901-1995), (ਡਾ.ਬਲਜੀਤ ਕੌਰ ਅਤੇ ਟੀ.ਡੀ.ਜੋਸੀ), ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।

ਕਵੀ: ਭਾਈ ਵੀਰ ਸਿੰਘ, ਪ੍ਰੋ.ਮੋਹਨ ਸਿੰਘ, ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ, ਬਾਵਾ ਬਲਵੰਤ, ਸਿਵ ਕੁਮਾਰ, ਜਗਤਾਰ, ਪਾਸ਼ , ਸੁਰਜੀਤ ਪਾਤਰ (ਪਾਠਕ੍ਰਮ ਦਾ ਹਿੱਸਾ ਹਨ: ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ/ ਵਿਸ਼ਾ ਵਸਤੂ/ ਸਾਰ)

ਭਾਗ -ਦੂਜਾ

ਪਿੰਜਰ (ਨਾਵਲ) ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ

ਲੇਖਕ ਦਾ ਜੀਵਨ ਤੇ ਰਚਨਾ/ ਨਾਵਲ ਦਾ ਸਾਰ/ ਵਿਸ਼ਾ-ਵਸਤੂ/ ਪਾਤਰ-ਉਸਾਰੀ।

ਭਾਗ -ਤੀਜਾ

ਭਾਰਤੀ ਕਾਵਿ ਸ਼ਾਸਤਰ: ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਸੰਪਰਦਾਵਾਂ

(ਧੁਨੀ ਸੰਪਰਦਾ, ਰਸ ਸੰਪਰਦਾ, ਅਲੰਕਾਰ ਸੰਪਰਦਾ)

ਭਾਗ -ਚੋਥਾ

ਅਰਥ ਆਧਾਰਿਤ ਸ਼ਬਦ ਵੰਨਗੀਆਂ: ਬਹੁਅਰਥਕ, ਸਮਾਨਾਰਥਕ, ਵਿਰੋਧਾਰਥਕ

ਅਰਥ ਪਰਿਵਰਤਨ ਦੀਆਂ ਦਿਸ਼ਾਵਾਂ

ਸੰਬੰਧਿਤ ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਸਾਲ	ਸਿਰਲੇਖ	ਪ੍ਰਕਾਸ਼ਕ
ਡਾ.ਬਲਜੀਤ ਕੌਰ ਅਤੇ ਟੀ.ਡੀ.ਜੋਸੀ		ਸੁਖਨ ਦੇ ਸੁਰਜ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ ਸੰਗ੍ਰਹਿ:1901-1995	ਗੁਰ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।
ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ	1950,2009	ਪਿੰਜਰ	ਤਾਰਾ ਪ੍ਰੈਸ, ਨਵੀਂ ਦਿੱਲੀ

ਸਹਾਇਕ-ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਸਾਲ	ਸਿਰਲੇਖ	ਪ੍ਰਕਾਸ਼ਕ
ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼ ਸਿੰਘ	1963	ਭਾਰਤੀ ਕਾਵਿ ਸ਼ਾਸਤਰ	ਪੰਜਾਬੀ ਸਾਹਿਤ ਅਕਾਦਮੀ,
ਡਾ.ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼ ਸਿੰਘ ਧਾਲੀਵਾਲ	2000	ਭਾਰਤੀ ਕਾਵਿ ਸ਼ਾਸਤਰ	
ਡਾ.ਰੰਜੂਬਾਲਾ	2017	ਅਰਥ ਵਿਗਿਆਨ	ਆਰਸੀ ਪਬਲਿਸ਼ਰਜ਼



MUSIC VOCAL -I (THEORY)

Course Code	MUC161
Course Title	Music Vocal-I (Theory)
Type of course	Theory
L T P	2: 0:0
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to develop right understanding for music. 2. The students will be able to realize the significance of music.
Course Outcomes	The students will be able to understand the need, content and process and basic guidelines of music.

UNIT-I

Definationof: Sangeet, Swar, That,Naad, Lai, Taal, Murki, Khatka, Rag

UNIT-II

Contribution of Guru Nanak Dev ji to Indian Music

UNIT-III

Historical development of Tanpura and Harmonium

Historical development of Gurmatsangeet.

UNIT-IV

Life sketch and contribution of: Bade Gulam Ali Khan, Tansen, FayazKhan

Historical development of Modern period.

Text and Reference Books:

S. No.	Author(S)	Title	Publisher
1	Dr.Arun Mishra	BhartiaKanthSangeet	AvamVadyaSangeetKanishka Publishers, New Delhi
2	Pt. Debu	On Indian Music	Howdery Roshan Press
3	Dr. Davinder Kaur	SangeetRoop	AP Publishers, Jalandhar
4	Prof. S. D. Dhawan	SangeetSikhiya	AP Publishers, Jalandhar
5	Hathras	SangeetVisharad	AP Publishers, Jalandhar

ECONOMICS-I

Course Code	ECO161
Course Title	Economics-I (Micro Economics)
Type of Course	Theory
LTP	4:0:0
Credits	4
Course pre-requisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. Understand the nature and scope of economics. 2. Understand the role of supply and demand. 3. To be able to use supply and demand functions in economic conditions and policies. 4. Understand the basic theories behind consumer behavior and producer behavior. 5. To be able to perform simple analysis of market for production inputs.
Course Outcomes	<p>Upon completion of Micro economics, students should be able to:</p> <ol style="list-style-type: none"> 1. Analyse about Traditional and Modern Definitions of economics. 2. Perform supply and demand analysis to analyse the impact of economic events on Markets, 3. Analyse the behaviour of consumers in terms of the demand for products, 4. Evaluate the nature and scope of economics. 5. To grasp knowledge regarding role of supply and demand.

UNIT-I

Introduction: Definition, Meaning, Nature and Scope of Economics. basic concepts, Consumer Behavior: Utility Analysis. Theory of Demand Law of Demand and its Exceptions, Elasticity of Demand and its measurement, Indifference curve analysis, Consumer Surplus and its measurement.

UNIT-II

Theory of Production and Costs: Concept, Law of Variable Proportions and Laws of Returns to Scale, Cost Concepts and Cost Curves in Short and Long periods (Traditional Theory of Costs).

Market Forms and Revenue: Behavior of Average Revenue and Marginal Revenue under Perfect Competition and Imperfect Competition. Relationship between Average Revenue, Marginal Revenue and Elasticity of Demand.

UNIT-III

Price and Output Determination: Price and Output Determination of the Firm and Industry under Perfect Competition, Monopoly and Monopolistic Competition in Short and Long run, Concept of Discriminating Monopoly.

UNIT-IV

Distribution: Marginal Productivity and Modern Theories of Wage Determination, Ricardian and Modern Theories of Rent. Classical and Loanable Funds Theory of Interest, Risk and Uncertainty Theories of Profit.

Text and reference Books:

S.NO.	Author(S)	Title	Publisher
1.	R.G. Lipsey	Introduction to Positive Economics	EL BS, London
2.	Stonier & Hague	A Text Book of Economics Theory	ELBS, London
3.	N.C. Ray	Microeconomic Theory	Macmillan, Delhi



Mathematics-I

Course Code	MAT161
Course Title	Mathematics-I (Calculus)
Type of course	DSC
L T P	40 0
Course Objective (CO)	The main goal of this course is to deliver the basics of sequences and series; differential and integral calculus, for real as well as multivariate functions.
Course Outcomes(CO)	<p>At the end of the course, the students will be:</p> <ol style="list-style-type: none"> 1. Equipped with the basics of differential calculus 2. Acquainted with the fundamentals of integral calculus 3. Conversant with the essentials of the infinite sequence and series 4. Up-to-date with the concepts of polar co-ordinates and multivariate functions 5. Able to write proofs, particularly for Unit I and Unit III, rather than applying formulas only.

UNIT-I

Differential Calculus: Precise definition of limit, continuity, one-sided limit, limits involving infinity, asymptotes of graphs, tangents and the derivative at a point, the derivative of a function, extreme values of functions, mean value theorem, monotone functions and the first derivative test, test for concavity, tracing of curves.

UNIT-II

Infinite sequences and Series: Sequences, infinite series, the integral test, comparison test, the root and ratio test, Gauss test, alternating series, absolute and conditional convergence, power series, Taylor and Maclaurin series, Power series, convergence of Taylor series.

UNIT-III

Polar Coordinates: Polar Coordinates, graphing in Polar coordinates, areas and lengths in Polar coordinates.

UNIT-IV

Multivariable Functions: Limits and continuity for functions of several variables, partial derivatives, the chain rule, directional derivatives, gradient vectors, tangent planes, extreme values and saddle points.

Text Books and References:

S. No .	Name	Author(S)	Publisher
1	Integral Calculus	S.Narayan	S.Chand and Company Ltd.
2	Calculus (3 rd ed.)	M.J.Strauss, G.L.Bradley and K.J.Smith	Pearson Education, 2007
3	Calculus (7 th ed.)	H.Anton, I.Bivens and S. Davis	John Wiley and Sons, 2002
4	Introduction to Calculus and Analysis (Volumes I & II)	R.Courant and F.John	Springer-Verlag, Inc., 1989
5.	Foundations of Analysis, American	J.L.Taylor	Mathematical Society, 2012
6.	Calculus, (12 th ed.)	G. B. Thomas, M. D. Weir and J. R. Hass, Thomas	Pearson Education, 2014

Geography-I

Course Code	GEO161
Course Title	Geography-I (Physical Geography)
Type of Course	Theory
L T P	3 0 0
Credits	3
Course Objectives (CO)	The objective of this paper is to introduce the basic concepts in the physical geography, essentially geomorphology to the students of geography in a brief but adequate manner.
Course Outcomes	<p>Student will be able to:</p> <ol style="list-style-type: none"> 1. Acquire an understanding and appreciation for the role that geography can play in community engagement. 2. Have a understanding of physical geographic processes, the global distribution of landforms and ecosystems and the role of the physical environment on human populations.

UNIT-A

Geography: Definition, place of physical geography within the discipline of geography, division of physical geography-geomorphology, climatology, oceanography. Theories of the Origin of the Earth: Kant, Laplace and Jeans & Jeffreys.

Interior of the Earth: Constitution, structure and composition, continental drift (with special reference to Wegener's theory and Plate Tectonics).

UNIT-B

Movements of the Earth: Orogenic, epeirogenic movements

Landforms resulting from forces of compression and tension: folding and faulting

Earthquakes and Volcanoes (causes, types and distribution)

UNIT-C

Rocks: Their origin, classification and characteristics.

Major Landforms: Mountains, plateaus and plains in the world.

Geomorphic Agents: Geomorphic processes (weathering and erosion).

UNIT-D

Geomorphological Landscapes: Fluvial, glacial, aeolian, coastal, Karst.

Applied Geomorphology: Applications to transport and landuse.

RECOMMENDED BOOKS			
Sr. no.	Name	Author(s)	Publisher
1	BhautikBhugol (in Punjabi)	Chawla, I.N.	Bharat Prakashan, Jalandhar.
2	A Text Book of Geomorphology	Dayal, P	Rajesh Publications New Delhi, 2007
3	The Face of the Earth Penguin	Dury, G.H.	Middlesex, England, 1977.
4	Understanding the Earth	Gass, I.G.:	The Artemrs Press, Sussex, 1973
5	Principles of Physical Geology,	Holmes Arthur	Thomas Nelson & Sons, Ltd., New York, Latest Edition, 1993.
6	Principles of Physical Geography,	Principles of Physical Geography	RasmeetParkashan, Jalandhar, 2005, Reprint 2015.

PHYSICAL EDUCATION-I (PRACTICAL)

Course Code	PED169
Course Title	Physical Education-I (Practical)
Type of Course	Practical
L T P	0 :0:2
Credits	0:0:1
Course pre-requisite	NA

- I. Practical (External) Marks: 40
- II. Division of Marks: Athletics (12) + Games (12) +Ground Markings (3+3),
- III. Practical Note Book (5), Viva–Voce (5)
- IV. Athletics Performance ——— 100M, Shot-put for Boys
- V. 100M, Shot-put for Girls
- VI. Games (Boys & Girls) —— Fundamentals, Rules, Performance
- VII. Volleyball
- VIII. Cricket



MUSIC (VOCAL)-I (PRACTICAL)

Course Code	MUC163
Course Title	Music Vocal-I(Practical)
Type of course	Practical
L T P	0:0:4
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<p>The students will be able to understand the need, content and process and basic guidelines of music.</p> <p>The students will be able to develop right understanding for music.</p> <p>The students will be able to realize the significance of music.</p>

List of Practical

- I. Bageshri,DarbariKanada,Dhanyasi,Kafi
- II. Talas:ektal,rupak,talwara
- III. One shabad
- IV. One folk song
- V. One Gazal
- VI. One tarana of any ragas
- VII. Sing with tanpura
- VIII. Knowledge of one vilamvatkiyal

Text and Reference books:

S. No.	Author(S)	Title	Publisher
1	Devinderkaur	Sangeetroop	AvamVadyaSangeetKanishka Publishers, New Delhi
2	Shanti goverdhan	Sangeetdarpan	Howdery Roshan Press

GEOGRAPHY (PRACTICAL)

Course Code	GEO163
Course Title	GEOGRAPHY (PRACTICAL)
Type of Course	Practical
L T P	0:0:2
Credits	1
Course Prerequisite	10+2
Course Objectives	<ol style="list-style-type: none"> 1. To introduce the concept of maps and relevance of maps in Geography. 2. To explain the elements of Map (Scale and Orientation) and steps in Map making. 3. To introduce relief representation.
Course Outcomes	<ol style="list-style-type: none"> 1. Students will learn about the history of cartography. 2. Students will learn about the geometry of earth and the types of scales. 3. Students will understand the methods of relief representation.

UNIT-I

History of cartography and types of maps.

Geometry of the earth (Latitudes and Longitudes International Date Line, Time Zones)

UNIT-II

Scales: Types of scales, Construction of Plain scale. Diagonal scale, Comparative scales and Time scales.

UNIT-III

Methods of showing relief: Hachure's, Hill-shading, Contours and Layers tints.

Directions: Plotting of course, True north, Magnetic north, finding true north with the pole star, a watch and a rod.

UNIT-IV

Chain and Tape survey: Triangulation, sketch and open traverse.

Recommended Books:

S. No.	Author's	Year	Title	Publisher
1	Mishra, R.P. and Ramesh, A.	1989	<i>Fundamentals of Cartography,</i>	Concept Publishing Co., New Delhi
2	Singh, L.R. and	1993	<i>Map work and Practical Geography,</i>	Singh Raghunandan Central Book Depot, Allahabad
3	Khullar, D.R.	2015	<i>Essentials of Practical Geography</i>	New Academic, Publishing Co., Jalandhar,



History-II
HISTORY OF MEDIEVAL INDIA 1000-1707 A.D.

CourseCode	HIS162
Course Title	History-II (History of Medieval India 1000-1707 A.D.)
Typeofcourse	Theory
LT P	4:0:0
Course Objectives	<p>After the completion of the course, students will be able to:</p> <ol style="list-style-type: none"> 1. Explain various issues of medieval History 2. Understand the basic features and characteristics of medieval History 3. Analyse development of Indian culture, arts and drama.
Course Outcomes (CO)	<p>The students are able to understand the following things such as:</p> <ol style="list-style-type: none"> 1. Explain the various issues of medieval History 2. The students knew how ancient period turned in to the phase of medieval history of India 3. Understood the basic features and characteristics of medieval History 4. They are able to analyse development of Indian culture and arts. 5. They introduced with important historical places of Medieval India on map.

UNIT-I

Establishment of Turkish Rule under Muizuddin of Ghor; Consolidation under Iltutmish and Balban. The Khaljis: Administration; agrarian and market reforms of Alauddin Khalji. The Tughlaqs: Muhammad Bin Tughlaq's administrative experiments and its impacts, Feroz Shah Tughluq's administrative and economic reforms.

UNITII

The Vijaynagar Kingdom: Establishment and Administration, Formation of Mughal Empire: Political condition of India on the eve of Babur's invasions; conquest and causes of his success. The Afghans: Establishment of Afghan power under Sher Shah Suri; administrative reforms.

UNITIII

The Mughal Empire: Central and provincial administration; Land revenue system.

The Mughal Empire: Mansabdari system; Jagirdari System. Debates on the decline of the Mughal Empire.

UNITIV

The establishment of Maratha Power: Conquest of Shivaji, Maratha administration, Land Revenue System, Chauth and Sardeshmukhi; Map: - Important Historical Places: Lahore, Delhi, Agra, Mathura, Fatehpur Sikri, Chittor, Jaipur, Udaipur, Panipat, Lucknow, Ahmednagar, Poona, Surat, Golkunda, Bijapur, Daultabad.

Text and reference books:

S.No	Author(S)	Title	Publisher
1	L.P.Sharma	Advanced Study of Medieval India	Sterling Publishers Pvt.Ltd. New Delhi
2	J.L.Mehta	History of Medieval India	Konark Publisher Pvt.Ltd. New delhi
3	R.S. Chaurasia	Medieval History of India.	Kings Books, New Delhi.

Political Science-II

COURSE CODE	PLS162
COURSE TITLE	Political Science-II (Political Theory-Concepts and Debates)
COURSE TYPE	DSE
L.P.T	4:0:0
COURSE OBJECTIVES	<p>This course is divided into two sections. Section A helps the student familiarize with the basic normative concepts of political theory. Each concept is related to a crucial political issue that requires analysis with the aid of our conceptual understanding. This exercise is designed to encourage critical and reflective analysis and interpretation of social practices through the relevant conceptual toolkit. Section B introduces the students to the important debates in the subject. These debates prompt us to consider that there is no settled way of understanding concepts and that in the light of new insights and challenges, besides newer ways of perceiving and interpreting the world around us, we inaugurate new modes of political debates.</p>
Learning Outcome	<ol style="list-style-type: none"> 1. To introduce students to basic conceptual categories 2. To make them familiar with the advanced theoretical debate in Political Theory & Currents trends 3. To bridge gap between theory and practice of Political Science in contemporary world

Unit-I

Power, Authority, Legitimacy: Meaning and Characteristics,

Political Culture: Meaning, Characteristics and Types,

Political Socialization: Meaning, Characteristics and Agencies.

Unit-II

Natural Rights, Moral and Legal Rights, Three Generations of Rights

Rights and Obligations Important Issue: Right of the girl child

Unit-III

Liberty: Meaning, Types & its Safeguards,

Equality: Meaning, Types, Formal Equality: Equality of opportunity ,Political equality Egalitarianism: Background inequalities and differential treatment.

Justice: Meaning and its various Dimensions. a) Procedural Justice b) Distributive Justice c) Global Justice Important Issue: Capital punishment

Unit-IV

Social Change: Meaning, Characteristics and Factors,

Democracy: Meaning, types, Necessary conditions for the Success of Democracy,

Theories of Democracy: Elite and Marxian.

SUGGESTED READINGS'.

1. Hoveyda Abbas, Ranajay Kumar *Political theory* Pearson Publications
2. O.P.Gauba (2002), An Introduction to Political Theory, New Delhi, Macmillan..
3. Andrew Heywood (2002), Political Theory, New Delhi, Palgrave.
4. J.C.Johari, Principles of Political Science Sterling Publishers, New Delhi.
5. A.C.Kapu r Principles of Political Science S. Chand & Company, New Delhi.
6. S.P. Verma Political Theory Geetanjali Publishing House, New Delhi
7. Andrew Hacker, Political Theory: Philosophy, Ideology & Science, Surjeet Publication (Indian Edition), 2006.
8. David Beetham, The Legitimation of Power: Issues in Political Theory, Macmillan, 1991.

PHYSICAL EDUCATION-II (THEORY)

Course Code	PED168
Course Title	Physical Education-II (Theory)
Type of Course	Theory
L T P	3:0:0
Course Objectives	<ol style="list-style-type: none"> 1. Gain knowledge about Personal Hygiene. 2. Understand the first aid. 3. They will be able to understand about Pollution. 4. Understand the Communicable Disease.
Course Outcomes	<p>After the completion of the course, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand the various system of human body. 2. Explain the Nutrition. 3. Understand the Health Education.

UNIT-I

Cell: Structure and Functions, Skeletal System: Types of bones, names of the various bones of the body, Various types of Joints.

Muscular System: Various types of muscles, structure of skeletal muscles.

Digestive system: It's organs and mechanism of digestion.

UNIT-II

Nutrition: Elements of balanced diet, Functional Diet/Food

Meaning and scope of health education. Hygiene problems of educational institutions and their remedial measures.

Personal hygiene; Care of eyes, teeth, ears, skin, hair and nail.

UNIT-III

Air and water pollution and its remedial measures.

First aid in case of snake bite, drowning, electric shock, burns, fracture, dislocation, sprain and strain.

UNIT-IV

Effects of Alcohol and smoking on health, Doping in sports.

Communicable Diseases: Mode of transmission, prevention and control of tuberculosis, hepatitis (A & B), Rabies and HIV/AIDS.

Text-Books—

S. No.	Author(S)	Year	Title	Publisher
1	R.D. Kansal	2015	Physical Education and Sports	Kalyani Publishers Ludhiana

Reference Books—

S. No.	Author(S)	Year	Title	Publisher
1	Kang G.S. and Deol N.S	2008	An Introduction to Health and Physical Education	21 st Century, Patiala,
2	Kang G.S	2000	Anatomy, Physiology and Health Education	Publication Bureau, Punjabi University, Patiala,
3	John Raynor	1983	Anatomy and Physiology	New York, Harper & Row
4	Parrot, J.W	1983	Anatomy and Physiology for Physical Education Teachers	Lend; Edward Arnold Healthful Living McGraw Hill.
5	Dhillon G.K	1998	Health Education	Punjab Text Book

ELECTIVE ENGLISH (ELECTIVE)-II

Course Code	ENG162
Course Title	Elective English-II (Language and Literature-II)
Type of course	Theory
L T P	4:0:0
Credits	4
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. Students will demonstrate familiarity with major authors, works, genres 2. Students will demonstrate the ability to read, write, and think critically 3. Students will use transcription conventions appropriately when transcribing words

UNIT-I

Untouchable by Mulkh Raj Anand—Detailed analysis of the complete Text

UNIT-II

The School for Scandal—Complete Text

UNIT-III

Literary Terms: Burlesque, Elegy, Hyperbole, Metaphor, Poetic Justice, Point of view, Dramatic Monologue and Tragedy

UNIT-IV

Transcription of Words: garage, data, menu, hello, cadet, exit, rebel (n), rebel (v), conduct(n), conduct (v), consume, idiot, depot, madam, handsome, petrol, perfect (adj.), perfect (v), vehicle, healthy, wealthy, police, sandwich, career, talent

Texts & Recommended Books:

S.No.	Author(S)	Year	Title	Publisher
1	Mulkh Raj Anand	1935	Untouchable	Penguin Books India
2	Sheridan	1991	The School for Scandal	Dover Publications
3	Abrams, M.H.	2008	Glossary of Literary Terms	Wadsworth CENGAGE Learning Publishers

Elective Punjabi-II

Course Code	PBI162
Course Title	Elective Punjabi-II (ਪੰਜਾਬੀ ਸਾਹਿਤ ਅਤੇ ਭਾਸ਼ਾ-II)
Type of Course	Theory
L T P	4 0 0
Credits	4
Course Objectives(CO)	<ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਤੋਂ ਜਾਣੂ ਕਰਵਾਇਆ ਜਾਏਗਾ। ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਸਾਹਿਤ ਦਾ ਅਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਪ੍ਰਤੀ ਜਾਗਰੂਕ ਕੀਤਾ ਜਾਵੇਗਾ। ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਇਕਾਂਗੀਆਂ ਦਾ ਅਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਦਾ ਹੁਨਰ ਉਤਪੰਨ ਹੋਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਨੂੰ ਦਫ਼ਤਰੀ ਅਤੇ ਘਰੇਲੂ ਮਸਲਿਆਂ ਸੰਬੰਧੀ ਚਿੱਠੀ-ਪੱਤਰ ਦੀ ਰਚਨਾ ਕਰਨ ਦੀ ਵਿਧੀ ਦੱਸੀ ਜਾਵੇਗੀ। ਵਿਦਿਆਰਥੀ ਨੂੰ ਕੋਸ਼ਕਾਰੀ ਦੇ ਨਿਯਮਾਂ ਅਤੇ ਵੱਖ-ਵੱਖ ਕੋਸ਼ਾਂ ਦੀ ਵਰਤੋਂ ਕਰਨ ਦਾ ਅਧਿਐਨ ਕਰਵਾਇਆ ਜਾਵੇਗਾ।
Course Outcomes (CO)	<ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਅਤੇ ਸਾਹਿਤ ਆਲੋਚਨਾ ਤੋਂ ਪੂਰੀ ਤਰ੍ਹਾਂ ਜਾਗਰੂਕ ਹੋ ਜਾਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਇਕਾਂਗੀ ਦੇ ਸਰੂਪ ਅਤੇ ਤੱਤਾਂ ਪ੍ਰਤੀ ਸੁਚੇਤ ਹੁੰਦਾ ਹੋਇਆ, ਇਕਾਂਗੀ ਦਾ ਆਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਕਰਨਾ ਸਿੱਖ ਜਾਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਚਿੱਠੀ-ਪੱਤਰ ਲਿਖਣ ਦੀ ਸਹੀ ਤਕਨੀਕ ਅਤੇ ਵਰਤੋਂ ਪ੍ਰਤੀ ਸੁਚੇਤ ਹੋ ਜਾਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਨੂੰ ਕੋਸ਼ਾਂ ਦੀ ਵਰਤੋਂ ਅਤੇ ਤਿਆਰੀ ਪ੍ਰਤੀ ਸਿਧਾਂਤਕ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਹੋ ਚੁੱਕੀ ਹੋਵੇਗੀ।

ਭਾਗ ਪਹਿਲਾ

ਪੰਜਾਬੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ (1901-1995), ਸੰਪਾਦਕ ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ ਤੇ ਡਾ.ਮਾਨ ਸਿੰਘ ਢੀਡਸਾ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਪਟਿਆਲਾ

- ਉ) ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ: ਨਿਕਾਸ ਅਤੇ ਵਿਕਾਸ
- ਅ) ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਗਲਪ: ਨਿਕਾਸ ਅਤੇ ਵਿਕਾਸ
- ਈ) ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਨਾਟਕ ਅਤੇ ਇਕਾਂਗੀ: ਨਿਕਾਸ ਅਤੇ ਵਿਕਾਸ
- ਸ) ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਵਾਰਤਕ: ਨਿਕਾਸ ਅਤੇ ਵਿਕਾਸ
- ਹ) ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਆਲੋਚਨਾ: ਨਿਕਾਸ ਅਤੇ ਵਿਕਾਸ

ਭਾਗ ਦੂਜਾ

ਮੰਚ ਘਰ (ਸੰਪਾ. ਕੁਲਦੀਪ ਸਿੰਘ ਧੀਰ ਅਤੇ ਹਿਰਦੇਸ਼ੀਤ ਸਿੰਘ ਭੋਗਲ), ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ। (ਵਿਸ਼ਾ- ਵਸਤੂ/ ਸਾਰ/ ਪਾਤਰ-ਉਸਾਰੀ)

ਭਾਗ ਤੀਜਾ

- ਉ) ਦਫ਼ਤਰੀ ਅਤੇ ਘਰੇਲੂ ਚਿੱਠੀ -ਪੱਤਰ
- ਅ) ਵਿਸ਼ਾਰਾਮ ਚਿੰਨ੍ਹ: ਪਰਿਭਾਸ਼ਾ, ਪਛਾਣ, ਵਰਤੋਂ ਦੇ ਨਿਯਮ

ਭਾਗ-ਚੋਥਾ

ਕੋਸ਼ਕਾਰੀ ਅਤੇ ਪੰਜਾਬੀ ਕੋਸ਼ਕਾਰੀ

ਕੋਸ਼ਕਾਰੀ ਦੀ ਪਰਿਭਾਸ਼ਾ, ਵਰਗੀਕਰਣ, ਪੰਜਾਬੀ ਕੋਸ਼ਕਾਰੀ ਦਾ ਨਿਕਾਸ ਅਤੇ ਵਿਕਾਸ, ਕੋਸ਼ ਵਿਗਿਆਨ ਨਾਲੋਂ ਭਿੰਨਤਾ

ਸੰਬੰਧਿਤ ਪੁਸਤਕਾਂ

ਲੇਖਕ/ਸੰਪਾਦਕ	ਸਾਲ	ਸਿਰਲੇਖ	ਪ੍ਰਕਾਸ਼ਕ
ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ ਤੇ ਡਾ.ਮਾਨ ਸਿੰਘ ਢੀਂਡਸਾ		ਪੰਜਾਬੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ (1901-1995)	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
ਕੁਲਦੀਪ ਸਿੰਘ ਧੀਰ ਅਤੇ ਹਿਰਦੇਜੀਤ ਸਿੰਘ ਭੋਗਲ		ਮੰਚ ਘਰ	ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ

ਸਹਾਇਕ-ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਸਾਲ	ਸਿਰਲੇਖ	ਪ੍ਰਕਾਸ਼ਕ
ਜੋਗਿੰਦਰ ਸਿੰਘ ਪੁਆਰ	2000	ਕੋਸ਼ ਵਿਗਿਆਨ ਅਤੇ ਪੰਜਾਬੀ ਕੋਸ਼ਕਾਰੀ	ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
ਹਰਕੀਰਤ ਸਿੰਘ	1998	ਕੋਸ਼ ਵਿਗਿਆਨ ਅਤੇ ਪੰਜਾਬੀ ਕੋਸ਼ਕਾਰੀ	ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ, ਚੰਡੀਗੜ੍ਹ



MUSIC VOCAL –II (THEORY)

Course Code	MUC162
Course Title	Music Vocal-II (Theory)
Type of course	Theory
L T P	2:0:0
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to develop right understanding for music. 2. The students will be able to realize the significance of music.
Course Outcomes	The students will be able to understand the need, content and process and basic guidelines of music.

UNIT-I

Origin and development of GurmatSangeet.

Defination of following: swar, spatak, kan, saurti, vadi

UNIT-II

Essey on following: folk music of panjab.

Importance of Gharana System.

UNIT-III

Talas: ektal, rupak, talwara.

UNIT-IV

Life-sketches and contribution: Begum Akhtar, OnkarNath Thakur, Pt. Ravi Shankar.

Describe the time theory of Indian Music.

Text and Reference Books:

EWS. No.	Author(S)	Title	Publisher
1	Dr.s.d Sharma	Sangeetusha	AvamVadyaSangeetKanishka Publishers, New Delhi
2	Pt. bhatkhande	Indian Music	Howdery Roshan Press

ECONOMICS-II

Course Code	ECO162
Course Title	Economics-II (Macro Economics)
Type of Course	Theory
LTP	4: 0:0
Credits	4
Course pre-requisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. Understand the principles of macroeconomics. 2. It deals with aggregates i.e., consumers as a whole, producers as a whole. 3. To enable the student teachers to Understand the basic theories of determination of income, consumption, investment, employment, money and interest, inflation, Monetary and Fiscal policies, and business cycles. 4. To be able to perform simple analysis of market for production inputs.
Course Outcomes	<p>Upon completion of Macroeconomics, students should be able to:</p> <ol style="list-style-type: none"> 1. Explain what the principles of macroeconomics. 2. Relates factors determine national income such as consumption, saving and investment. 3. Explains definition, analysis of market for production inputs causes and effects of inflation. 4. Analysis of market for production inputs.

UNIT-I

Introduction: Nature, Meaning and Scope of Macro-Economics.

Consumption Function: Average and Marginal Propensity to Consume, Keynes' Psychological Law of Consumption.

Investment Function: Types of Investment, Investment Demand Schedule and Factors Affecting Investment Decisions, Marginal Efficiency of Capital, Static and Dynamic Multiplier.

UNIT-II

Determination of Income and Employment: Classical and Keynesian Theories of Income, Output And Employment, Say's Law of Markets. Principle of Effective Demand.

UNIT-III

Money and Banking: Money: Definition, Functions and Role Quantity Theory of Money: Fisher's Equation and Cambridge Equation, Keynesian Liquidity Preference Theory.

Banking: Major Functions of Commercial Banks and Process of Credit Creation.

UNIT-IV

Inflation and Macro-Economic Policies: Cost-push and Demand-pull Theories of Inflation, Measures to Control Inflation. Monetary and Fiscal Policies for Stabilization.

Trade Cycle: Meaning and Phases.

Text and reference Books:

S.No.	Author(S)	Title	Publisher
1.	Dernburg, T.F. & McDouga	Macro Economic	McGraw Hill, New York
2.	Vaish, M.C	Macro Economic Theory	OUP, New Delhi
3.	Ackley, Gardner	Macro Economic Theory	McMillan, New York
4.	Ahuja, H. L	Macroeconomics Theory and Policy	S. Chand Pub. New Delhi

Ordinary Differential Equations

Course Code	MAT162
Course Title	Mathematics-II (Ordinary Differential Equations)
Type of course	DSC
L T P	40 0
Credits	4
Course prerequisite	Student must have the knowledge of Basic Mathematics
Course Objective (CO)	The main objective is to exhibit the techniques for obtaining solutions to ordinary differential equations, the basic ideas and the theory behind those techniques.
Course Outcomes(CO)	<p>At the end of the course, the students will be:</p> <ol style="list-style-type: none"> 1. Able to exhibit the techniques for obtaining solutions to ordinary differential equations 2. Aware of the basic ideas and the theory behind the techniques for solving the ODEs. 3. able to combine the abstract concepts with examples in order to intensify the understanding of the subject

Unit-I

Origin of Differential Equations, Basic definitions, Family of solutions, Geometric interpretation, Isoclines, Initial and boundary value problem. Basic Existence Theorem (Statement).

Unit-II

Equations of Order One, Separation of variables, Exact Equations, Linear Equations, Integrating factors, Bernoulli's equation, Elementary applications.

Unit-III

General linear equations: General solutions, Linear independence of solutions, differential operators. Linear equations with constant coefficients: Auxiliary equation.

Unit-IV

Non-

homogeneous equations: Method of undetermined coefficients, Variation of parameter method, Nonlinear Equations.

Text Books and References:

S. No	Name	Author(S)	Publisher
1	Elementary differential equations (7 th ed.)	Earl D. Rainville and P. E. Benedict	Macmillan Publishing Company, 1989
2	Differential Equations (3 rd ed.)	S. L. Ross	John Wiley and Sons, India 2004
3	An introduction to ordinary differential equations	E. A. Coddington	Prentice- Hall

GEOGRAPHY- II

Climatology & Oceanography

Course Code	GEO162
Course Title	Geography- II (Climatology & Oceanography)
Type of Course	Theory
L T P	4 0 0
Credits	4
Course Prerequisites	Nil
Course Objectives (CO)	The objective of this paper is to acquaint the students with the elements and attributes of climatology and oceanography as climate plays a very vital role in human life and oceans are storehouses of resources.
Course Outcomes	Student will be able to: Acquire an understanding and appreciation for the role that geography can play in community engagement. Have a understanding of physical geographic processes, the global distribution of landforms and ecosystems and the role of the physical environment on human populations.

UNIT-I

Definition of Climatology: Climate and Weather.

Climate: Elements and controls.

Physical structure of the atmosphere and attributes of different layers, Physical and Chemical composition of the atmosphere: Dust particles, vapour particles, active gases, inert gases.

Insolation and Temperature: Horizontal distribution of insolation, factors affecting temperature of a place, vertical and horizontal and annual, seasonal and diurnal distribution of temperature

UNIT-II

Atmospheric Pressure and Winds Distribution: Atmospheric disturbances (Tropical cyclones, temperate cyclones and anticyclones).

Atmospheric Moisture: Forms of condensation – Cloud, dew, fog and frost. Precipitation forms and types. World patterns of precipitation: Spatial and seasonal.

Climatic Classifications and their Bases: Elementary discussion of Koppen's classification of climates and climatic types.

Role of Climate in Human Life: Atmospheric pollution and global warming – general causes, consequences and measure of control.

UNIT-III

Oceanography: Definition, topography of the ocean basins; continental shelf, continental slope, deep sea plain and oceanic deep.

Features: Trench, trough, oceanic ridge, guyots, seamount. Factors controlling the world patterns of distribution of temperature and salinity in the ocean waters.

UNIT-IV

Movements of Oceanic Waters: Waves and currents. Surface currents of the oceans. Marine Flora, Fauna and Deposits, Corals. Ocean as storehouse of resources for the future.

RECOMMENDED BOOKS

Sr. no.	Name	Author(s)	Publisher
1	Our Atmosphere	Bhutani, Smita	Edited by R.C. Chandna, K P, Ludhiana, Delhi, 2002.
2	General Climatology	Critchfield, H.J	Prentice Hall of India, Private Ltd., New Delhi, 1983.
3	Physical Geography,	Singh, Savinder	Pravalika Publications, Allahabad, 2015.
4	Climatology,	Lal, D.S	Sharda PustakBhawan, Allahabad, 2011.
5	An Introduction to Physical Geography	Khan, N.:	Concept New Delhi, 2002.
6	Oceanography: A View of the Earth	Gross, Grant, M	Prentice Hall, New Jersey, 1995



PHYSICAL EDUCATION-II (PRACTICAL)

Course Code	PED170
Course Title	Physical Education-II (Practical)
Type of Course	(Practical)
L T P	0:0:2
Credits	1
Course pre-requisite	NA

- I. Practical (External) Marks: 40
- II. Division of Marks: Athletics (12) + Games (12) +Ground Markings (3+3),
- III. Practical Note Book (5), Viva–Voce (5)
- IV. Athletics Performance ——— 100M, Long Jump for Boys
- V. 100M, Long Jump for Girls
- VI. Games (Boys &Girls) —— Fundamentals, Rules, Performance
- VII. Handball and Kho-Kho
- VIII. Kho-Kho



MUSIC VOCAL-II (PRACTICAL)

Course Code	MUC164
Course Title	Music Vocal-II (Practical)
Type of course	Practical
L T P	0:0:4
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to understand the need, content and process and basic guidelines of music. 2. The students will be able to develop right understanding for music. 3. The students will be able to realize the significance of music.

List of Practical

- I. Ragas: khamaj, bhimpalsi, chanderkouse
- II. Talas: depchadi, rupak, talwara
- III. One shabad
- IV. One folk song
- V. One Gazal
- VI. One tarana of any ragas
- VII. Sing with tanpura
- VIII. Knowledge of one vilamvatkiyal

Text and References:

S. No.	Author(S)	Title	Publisher
1	Devinderkaur	Sangeetroop	AvamVadyaSangeetKanishka Publishers New Delhi
2	Shanti goverdhan	Sangeetdarpagan	Howdery Roshan Press

Program Code: UG011

GEOGRAPHY(PRACTICAL)

CourseCode	GEO164
CourseTitle	GEOGRAPHY(PRACTICAL)
Type of Course	Practical
LTP	0:0:2
Credits	1
Course Prerequisite	10+2
CourseObjectives	<ol style="list-style-type: none"> 1. To introduce the concept of maps and relevance of maps in Geography 2. To explain the elements of Map (Scale and Orientation) and steps in Mapmaking
CourseOutcomes	<p>CO1: Students will learn about the enlargement and reduction of maps.</p> <p>CO2: Students will learn about the weather maps.</p>

UNIT-I

Brief History of Cartography Elements of Map Design

UNIT-II

Enlargement and reduction: Graphic methods -- square and triangle; Introduction to concept of Global Positioning System (GPS).

UNIT-III

Weather maps: General introduction to the study of weather maps, The scheme of weather symbols employed in Indian daily weather maps; Weather in India: Summers season, Winter season.

UNIT-IV

Forecasting of weather through the study of weather maps and recent advances in weather forecasting.

Recommended Books:

S.No.	Author's	Year	Title	Publisher
1	Mishra, R.P. and Ramesh, A.	1989	<i>Fundamentals of Cartography</i> ,	Concept Publishing Co., New Delhi
2	Singh, L.R. and Singh Raghunandan	1993	<i>Mapwork and Practical Geography</i> ,	Central Book Depot, Allabad
3	Khullar, D.R.	2015	<i>Essentials of Practical Geography</i>	New Academic, Publishing Co., Jalandhar,



History of Modern India A.D.1757-1857

Course Code	HIS261
Course Title	History of Modern India A.D.1757-1857
Type of Course	Theory (Major Core Course)
L T P	4 0 0
Credits	4
Course Objectives	<ol style="list-style-type: none"> 1. The paper is a study of British colonialism in which India can be studied as a classic case of British Imperialism. 2. The construction of the colonial state in north and south India followed constitutional changes which further enhanced to establish British control. 3. Indian nationalism responded starting with peasant and tribal revolts, mutiny of 1857.
Course Outcomes (CO)	<p>On Completion of This Course the Students will be able to:</p> <ol style="list-style-type: none"> 1. Acquaint students about the increasing dominance of British colonialism in post Mughal period. 2. They are familiar with the first war of independence of 1857. 3. They are awakened about socio-economic, political and cultural changes during British regime. 4. They introduced with important historical places of Modern India on map.

Unit I

Coming of the Europeans; Portuguese, Dutch, French and British. Foundation of British Rule:

Unit II

Foundation of British Rule: Circumstances leading to the battles of Plassey and Buxar and their significances.

Unit III

Growth of modern education, Developments of the agricultural policies; Commercialization of Agriculture; rural indebtedness, Development in transportation.

Unit IV

Colonial state and Indian response; Early peasant and tribal movements, Revolt of 1857; causes, events, nature, characteristics.

Map: Important Historical Places- Delhi, Calcutta, Madras, Bombay, Goa, Pondichery, Surat, Plassey, Buxer, Gwalior, Jhansi, Hyderabad, Sabarmati, Amritsar, Lucknow and Aligarh.

Text Books and References:

S.No.	Author(S)	Title	Publisher
1	Bipan Chandra	History of Modern India	Orient Longman, Hyderabad,
2	Sumit Sarkar	Modern India (1885-1947)	
3	A.C. Bannerjee	The New History of Modern India (1707-1947),	K.P.Bagchi, Calcutta, 1983.
4	M.K. Chaudhuri	Trends of Socio-Economic Change in India(ed.),(1871-1961),IIAS,	Shimla, 1969.

POLITICAL SCIENCE-III (Indian Political System)

COURSE CODE	PLS261
COURSE TITLE	Indian Political System
L T P	4:0:0
COURSE OBJECTIVES	<ul style="list-style-type: none"> ➤ To enable the student to study and understand the basics of Indian Constitutions to aware the learners about the duties of Citizens. ➤ To acquaint the learners with political vocabulary. ➤ To aware them about roots of Indian constitution and its relevance in present scenario. ➤ To acquaint the learners with various posts and procedure for election
LEARNING OUTCOME	<ul style="list-style-type: none"> ➤ To introduce students to basic conceptual categories ➤ Students will be able to understand the Indian constitution ➤ Students will be competent for the competitive exams. ➤ Students will able to understand the center- state relationship ➤ To enhance skill and job potential of students.

UNIT-I

Constitution Assembly: Historical Background

The Company Rule (1773-1858)

The Crown Rule (1858-1947)

Making of The Constitution: Demand for the Constituent Assembly, Composition of the Constituent Assembly, Working of the Constituent Assembly, Salient Features of the Constitution, Preamble of The Constitution: Significance of the Preamble, Preamble as Part of the Constitution

Unit II: Federal India

Concept and Models in Federalism, Nature of Indian Federalism

Centre State Relations: Legislative, Administrative and Financial

Centralizing and Decentralizing features of Indian Federalism,

Emerging Trends in Centre- State Relations.

UNIT-III

Fundamental Rights, Directives Principles of State policy and Fundamental Duties:origin, Importance & Criticism

Election of the President, Qualification, oath and Condition, Term and Impeachment, Powers and Functions of the President, Veto Powers, Pardoning Power of the President:

Organization of Parliament, Composition of the two Houses, system of Election to the Lok Sabha, Leaders of Parliament, session of Parliament: devices of Parliamentary Proceeding and Joint Sitting of two Houses.

UNIT-IV

Appointment of the Prime Minister, Powers, Changing role of Prime Minister,

Supreme Court of India: Its Composition, Powers and Functions of Supreme Court, Position and Independence of judiciary,

Governor: Appointment, Powers and position of the governor,

State Legislature: Composition, Powers and Role, State Council of Ministers and Chief Minister: Powers and Position of the State Council Minister & Chief Minister.

SUGGESTED READINGS'.

- Abbas Hoveyda, Ranjay Kumar, Mohammad Aftab Alam, Indian *Government and Politics*, New Delhi, Dorling Kindersley, 2011.
- Singh, M. P and Rekha Saxena, *Indian Politics: Contemporary Issues and Concerns*, New Delhi, Prentice Hall, 2008
- Dua, B. D. and M.P. Singh (eds.), Indian Federalism in the New Millennium, New Delhi, Manohar, 2004.
- Hasan Zoya (eds.), *Politics and the State in India*, New Delhi, Sage Publications, 2000.
- Saez Lawrence, *Federations Without a Centre: The Impact of Political and Economic Reform on India's Federal System*, New Delhi, Sage, 2002.
- Austin Granville, *Working a Democratic Constitution: A History of the Indian Experience*, New Delhi, Oxford University Press, 1999.
- Basu, D.D., *Introduction to the Constitution of India*, New Delhi, Prentice Hall, 2008.
- Kashyap Subash (eds.) , *Constitutional Reforms: Problems, Prospects and Perspectives*, New Delhi, Radha Publications, 2004.
- Kashyap Subhash, *Our Political System*, New Delhi, National Book Trust, 2008.
- Kashyap Subhash, *Our Parliament*, New Delhi, National Book Trust, 2004.
- Brass Paul, *The Politics of India since Independence*, Cambridge, Cambridge University Press, 1994.
- Sharma Veena, *President in Indian Political System*, New Delhi, Rawat Publications, 2001.
- Khan, Abbas M., *Indian Political System*, New Delhi, Anmol Publications, 2006.
- Verma B.K. ,*Modern Indian Political System: Problem and Prospects*, New Delhi, Global Vision Publishing House, 2006.

PHYSICAL EDUCATION-III (THEORY)

Course Code	PED267
Course Title	Physical Education-III (Theory)
Type of Course	Theory
L T P	4:0:0
Credits	4
Course pre-requisite	NA
Course Objectives	<ol style="list-style-type: none"> 1. Gain knowledge about Pranayama and sudhikiryas. 2. Understand the various psychological factors effecting sports performance 3. They will be able to understand about Growth & Development.
Course Outcomes	<p>After the completion of the course, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand the various theories of physical education. 2. Explain the yoga and its types. 3. Understand the various asanas. 4. Understand the sports and socialization.

UNIT-I

Meaning of Yoga, aim of yoga and types of yoga. Concept of Hath aYoga.

Asanas: -Meaning of Asanas, Rules of Yoga Asanas and importance of Yoga Asanas

UNIT-II

Methods and advantage of following Asanas

Padam asana, Vajar asana, Dhanur asana, Sarvang asana, Hal asana, Pashimottan asana, Mayur asana, Ushtra asana, Sidha asana, Shirsh asana, Shav asana, Chakara asana, Makar asana, Taad asana, Matsya asana, Trikon asana, Garud asana, Naukaasana, Salab asana and Bhujang asana.

Pranayama: -Meaning of pranayama and objectives of pranayama.

Types of Pranayama and Physiological values of Pranayama.

UNIT-III

SudhiKiryas: -Introduction and objectives of ShudhiKiryas, Physiological Values of ShudhiKiryas.

Motivation in physical Education.

Psychological factors effecting sports performance i.e. stress, tension, anxiety and aggression.

UNIT-IV

Growth and development during childhood;

Physical

Mental

Emotional

Inter-personal social development.

Sports and Economy.Causes of poor performance of Sports in India.Sports and Socialization-integration through sports (National & International).

Program Code: UG011

Text-Books—

S. No.	Author(S)	Year	Title	Publisher
1	R.D. Kansal	2015	Physical Education and Sports	Kalyani Publishers Ludhiana

Reference Books—

S. No.	Author(S)	Year	Title	Publisher
1	Singh Kanwaljit& Singh Inderjeet	2000	Sports Sociology	F P, New Delhi
2	Tandon, D.K.	2001	Scientific basis of Physical Education	F P, New Delhi
3	Singh Ajmer and Gill Jagtar	2004	Essentials Physical Education	Kalyani Publishers Ludhiana
4	Kang G.S.	2000	Anatomy, Physiology and Health Education	Publication Bureau, Punjabi Uni. Patiala
5	Kang G.S. and Deol, N.S.	2008	Health and Physical Education	21 st Century, Patiala, 2008



ENGLISH (ELECTIVE)-III

CourseCode	ENG261
CourseTitle	English (Elective)-III
Typeofcourse	Theory
LTP	4:0:0
Credits	4
Courseprerequisite	NA
Course Objectives(CO)	<ol style="list-style-type: none"> 1. To familiarizethestudentswithmajorauthors,works,genres. 2. To inculcateabilitytoread,write, and think critically. 3. Toenable themtouse transcriptionconventionsappropriatelywhentranscribing words

UNIT-I

Animal Farm by George Orwell— Detailed analysis of the complete text , use of allegory and satire, discussion on plot, rhetoric, technique of repetition, characterization and use of humour.

UNIT-II

Fresh Showers: Belinda's Toilet, London, The Tables Turned, Man and Nature, The Cloud, Voices, Futility, Day Break, Self's the Man, Spinster, Leave This Chanting, The Poet, Guru.

UNIT-III

New Directions- Part 1, 2

UNIT-IV

Transcription of following words: agony, antonym, capable, committee, decorum, aeroplane, calendar, privacy, absolute, academy, academic, advertisement, adversity, allopathic, mathematics, automobile, biography, biology, competition, competitive, certificate, certify, democracy, capacity, magnificent, photography, photograph, photographic, vindictive, celebrity

New Directions- Part 3

Texts & Recommended Books:

S.No.	Author(S)	Year	Title	Publisher
1	George Orwell	2001	Animal Farm	Penguin Books India
2	G.N.D.U. Amritsar	2004	Fresh Showers	G.N.D.U. Amritsar
3	Peter S. Gardiner		New Directions 2 nd edn.	CUP
4	J.D.O'Connor.	2008	Better Pronunciation of English	Wadsworth CENGAGE Learning Publishers

PUNJABI (ELECTIVE)-III

ਪੰਜਾਬੀ ਵਾਰਤਕ ਅਤੇ ਗਲਪ ਸਾਹਿਤ

Course Code	PBI261
Course Title	Punjabi Elective-III (ਪੰਜਾਬੀ ਵਾਰਤਕ ਅਤੇ ਗਲਪ ਸਾਹਿਤ)
Type of Course	Theory
L T P	4:0:0
Credits	4
Course Prerequisite	N.A
Course Objectives	<ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਵੀਆਂ ਦੀ ਜੀਵਨੀ ਤੋਂ ਜਾਣੂ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਵਿਤਾ ਦੀ ਵਿਸ਼ੈਗਤ ਜਾਣਕਾਰੀ ਹੋ ਜਾਵੇਗੀ। ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੀਆਂ ਵੱਖ-ਵੱਖ ਵਿਧਾਵਾਂ ਨੂੰ ਮਾਨਣਯੋਗ ਹੋ ਜਾਣਗੇ। ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਪੰਜਾਬੀ ਕਹਾਣੀ ਦਾ ਅਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਦਾ ਹੁਨਰ ਉਤਪੰਨ ਹੋਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦਾ ਵਿਸ਼ਲੇਸ਼ਣਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਯੋਗ ਹੋ ਜਾਣਗੇ।

ਭਾਗ-ੳ

ਵਾਰਤਕ ਅਤੇ ਗਲਪ ਸਾਹਿਤ ਰੂਪ: ਸਿਧਾਂਤ, ਪ੍ਰਕਿਰਤੀ ਅਤੇ ਤੱਤ

ਭਾਗ-੪

ਕਥਾ ਕਹਾਣੀ

ਭਾਗ-੫

ਸੱਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ (ਨਿਬੰਧ ਸੰਗ੍ਰਹਿ) -ਪਹਿਲੇ 6 ਨਿਬੰਧ

ਭਾਗ-੬

ਸੱਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ (ਨਿਬੰਧ ਸੰਗ੍ਰਹਿ) -ਬਾਕੀ 6 ਨਿਬੰਧ

ਪਾਠ ਅਤੇ ਹਵਾਲਾ- ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਫੁਸਤਕ	ਪਬਲਿਸ਼ਰਜ਼
ਡਾ. ਰਤਨ ਸਿੰਘ ਜੱਗੀ	ਸਾਹਿਤ ਦੇ ਰੂਪ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ ਸੈਣੀ	ਵਾਰਤਕ ਸਿਧਾਂਤ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
(ਸੰਪਾਦਕ) ਸਿੰਘ, ਰਘਬੀਰ ਅਤੇ ਸਿੰਘ, ਦਰਬਾਰਾ	ਕਥਾ ਕਹਾਣੀ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
(ਸੰਪਾਦਕ) ਬਾਜਵਾ, ਰ. ਸਿੰਘ ਅਤੇ ਰੰਧਾਵਾ, ਵ. ਸਿੰਘ	ਸੱਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ

MUSIC VOCAL-III (THEORY)

Course Code	MUC261
Course Title	Music Vocal-III(Theory)
Type of course	Theory
L T P	2:0:0
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to develop right understanding for music. 2. The students will be able to realize the significance of music.
Course Outcomes	The students will be able to understand the need, content and process and basic guidelines of music.

UNIT-I

Classification of the instruments used in Gurmat Sangeet.

Defination of following: khatha, Kan, murki, andolan

UNIT-II

Define and explain the nature of Music

Essey of the following: folk music of panjab.

UNIT-III

Understanding of the musical concepts.

Varieties of Tanas.

Merit and Demerits of a singer.

UNIT-IV

Life-sketches and contribution UstadFaiyaz Khan, Swami Haridas, UstadVallyat Hussain Khan.

Understanding of the musical concepts.

Role of Radio and TV in music.

Describe: Nad, Savar, Shruti Gram, SankiranNiam, Tal.

Text and Reference Books:

S. No.	Author(S)	Title	Publisher
1	Devinder kaur	Sangeet roop	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Shanti goverdhan	Sangeet darpan	Howdery Roshan Press

ECONOMICS-III (Indian economy)

Course Code	ECO261
Course Title	Economics-III (Indian Economy)
Type of Course	Major /Theory
LTP	4:0:0
Credits	4
Course Pre-requisite	NA
Course Objective	<ol style="list-style-type: none"> 1. To make the students understand the development process of Indian economy since independence. 2. To introduce the sector-specific policies and their impact on key economic indicators. 3. To acquaint the students with the impact of planning and economic reforms in India.
Course Outcomes	<ol style="list-style-type: none"> 1. Students will understand the process of development in India. 2. Students will examine demographic features of Indian economy and direction and composition of foreign trade. 3. Students will comprehend the growth of national income, planning process and economic reforms in India.

Section A

Indian Economy on the Eve of Independence: Introduction: Features and Characteristics of Indian Economy since Independence: Low Level of Economic Development, Occupational Structure and Demographic Position. Introduction, the Goals of Five-Year plans and its critical Evaluation; NITI Aayog, NDC-Composition, role and functions

Section B

Economic Reforms: Liberalization, Privatization and Globalization and its assessment,

Industry: Performance and problems of industrial development, Public sector Versus Private sector, Role of Privatisation, industrial Policies with Special Reference to 1991, New manufacturing Policy 2011, Industrial Disputes and Trade union, Features of Industry Revolution 4.0

Agriculture: Nature and Importance, Causes of decline in productivity, green revolution and New Agriculture Strategy, Land Reforms: Need, Implementation and Evaluation

Section C

Rural Development: Meaning, Institutions that cater to Rural Development like Panchayats, NABARD, Commercial Banks, Co-operatives, Regional Rural Banks and Other Ancillary Sources of Finance,

Major economic problem: unemployment, poverty, inflation etc.

Section D

Principal Features of Indian Tax Structure. Division of Financial Resources between Centre and the States.Finance Commission(latest)

Development Experience of India: comparison with neighbours India and Pakistan India and China
Issues: economic growth, population, sectoral development and other Human Development Indicators

extandReferencebooks

S.NO.	Author(S)	Title	Publisher
1.	Puri, V.K.and S.K.Mishra	Indian Econ	Himalaya Publishing House (latest edition).
2.	Kapila, Uma,	Indian Economy since Independence	Academic Foundation (latest edition).
3.	Dhingra, I.C	The Indian Economy: Environment and Policy	ultan Chand and Sons, New Delhi (latest edition).

Note: Students must evaluate reports published by,MoSPI,Niti Aayog, PIB ,RBIetc..

MATHEMATICS-III

Course Code	MAT261
Course Title	Mathematics-III
Type of course	Theory
L T P	6:0:0
Credits	6
Course prerequisite	NA
Course Objective (CO)	<p>1. To have the knowledge of basic properties of field of real numbers and convergence. To inculcate the traits of rational decision making. To develop the research proposal and also find out the optimal solution.</p>
Course Outcomes	<p>1. They become able to find Bounded and unbounded sets, Infimum and supremum of a set.</p> <p>2. They can understand Bolzano- Weierstrass theorem for sets, topology of real line and R^n.</p> <p>3. They become able to understand the Theorems on limits of sequences, Subsequences, Monotone sequences, Monotone convergence Theorem.</p>

UNIT-I

Real Analysis, Finite and infinite sets, examples of countable and uncountable sets. Real line, bounded sets, suprema and infima, completeness property of R , Archimedean property of R , intervals. Concept of cluster points and statement of Bolzano-Weierstrass theorem. Real Sequence, Bounded sequence, Cauchy convergence criterion for sequences. Cauchy's theorem on limits, order preservation and squeeze theorem, monotone sequences and their convergence (monotone convergence theorem without proof).

UNIT-II

Infinite series. Cauchy convergence criterion for series, positive term series, geometric series, comparison test, convergence of p -series, Root test, Ratio test, alternating series, Leibnitz's test (Tests of Convergence without proof). Definition and examples of absolute and conditional convergence. Sequences and series of functions, Pointwise and uniform convergence. M_n -test, M -test, Statements of the results about uniform convergence and integrability and differentiability of functions, Power series and radius of convergence.

UNIT-III

Descriptive Statistics and Probability Theory: -Concepts of a statistical population and sample from a population, quantitative and qualitative data, nominal, ordinal and time-series data, discrete and continuous data. Presentation of data by tables and by diagrams, frequency distributions for discrete and continuous data, graphical representation of a frequency distribution by histogram and frequency polygon, cumulative frequency distributions (inclusive and exclusive methods). Measures of location (or central tendency) and dispersion, moments, measures of skewness and kurtosis, cumulants. Bivariate data: Scatter diagram, principle of least-square and fitting of polynomials and exponential curves. Correlation and regression. Karl Pearson coefficient of correlation, Lines of regression, Spearman's rank correlation coefficient, multiple and partial correlations (for 3 variates only). Random experiment, sample point and sample space, event, algebra of events, Definition of Probability - classical, relative frequency and axiomatic approaches to probability, merits and demerits of these

approaches (only general ideas to be given). Theorem on probability, conditional probability, independent events. Baye's theorem and its applications.

UNIT-IV

Linear Programming: -Introduction to Operational Research and overview of O.R. modeling. Linear independence and dependence. Convex sets. Extreme points. Hyperplanes and Polyhedral sets. Solution of a System of Linear Equations, Concept of Basis, Basis Feasible Solutions. Introduction to Linear Programming Problem. Problemformulations. Graphical solution. Theory of Simplex method. Two Phase Simplex method. M-charne's simplex method. Duality in Linear Programming, Economic interpretation of duality. Assignment problem. Transportation problem and its mathematical formulation, northwestcorner method least cost method and Vogel approximation method for determination of starting basic solution, algorithm for solving transportation problem, assignment problem and its mathematical formulation, Hungarian method for solving assignment problem.

Text and Reference Books

S. No	Name	Author(S)	Publisher
1	Calculus (Vol. I)	T.M. Apostol	John Wiley and Sons (Asia) P. Ltd., 2002
2	Introduction to Real Analysis	R.G. Bartle and D. R. Sherbert	, John Wiley and Sons (Asia) P. Ltd., 2000
3	Fundamentals of Mathematical Statistics	S.C. Gupta and V.K. Kapoor	11th Ed., Sultan Chand and Sons, 2007
4	Linear Programming	. G. Hadley	Narosa, 2002
5	Operations Research- An Introduction	Hamdy A. Taha	Prentice Hall, 8th edition, 2007.
6	Mathematical Statistics with Applications	J.E. Freund	7th Ed., Pearson Education, 2009
7	Introduction to the Theory of Statistics	A.M. Mood, F.A. Graybill and D.C. Boes,	3rd Ed., Tata McGraw Hill Publication, 2007.
8	Introduction to Mathematical Statistics	R.V. Hogg, A.T. Craig and J.W. McKean	6th Ed., Pearson Education, 2005.
9	Elementary Analysis- The Theory of Calculus Series- Undergraduate Texts in Mathematics,	K.A. Ross	Springer Verlag, 2003.Edition, Tata McGraw Hill, 2010.
10	Fundamentals of Statistics	A.M. Goon, M.K. Gupta and B. Dasgupta	Vol. I, 8th Ed., World Press, Kolkatta, 2005.

Geography of Resources

Course Code	GEO261
Course Title	Geography of Resources
Type of Course	Theory
L T P	3 0 0
Credits	3
Course Objectives (CO)	<ul style="list-style-type: none">• The course aims to develop an understanding of the environment, its components, and resource classification based on their characteristics.• It explores the distribution and significance of forests, fisheries, and soil types, along with conservation strategies.• Students will analyze human population dynamics and their relationship with resources.• Additionally, the course examines human-environment interactions, biodiversity loss, and major environmental issues like pollution, food security, and deforestation.
Course Outcomes	<p>CO1: To understand the concept of resources and their interface with environment.</p> <p>CO2: To study various methods and approaches of conservation and management of natural resources</p> <p>CO3: Analyze the spatial distribution of key natural resources such as water, soil, forests, minerals, and energy resources.</p> <p>CO4: Examine the factors influencing the uneven distribution of resources across the globe.</p>

UNIT-I

Environment and Resources: Meaning, nature and components of environment.

Definition of Resources, Classification- Biotic abiotic, Exhaustible and inexhaustible, Potential and Developed Agricultural and Pastoral, Mineral and Industrial.

UNIT-II

Utilization of Natural Resources: Distribution availability, utilization and conservation of water, minerals (in general) and energy resources; their economic and environmental significance and sustainability.

Types and distribution of forests, their economic and environmental significance and conservation.

Types and distribution of fisheries—their economic and environmental significance and conservation.

Major soil types and their distribution; problems of soil erosion and soil conservation.

UNIT-III

Human Resources: Number, Growth, Distribution and Density.

Population Resources Relationship: Population- Resource Regions of the world.

UNIT-IV

Environment: Natural and Human, Man-environment relationship—determinism, Possibilism, ecology.

Biodiversity: Loss of natural and agro-biodiversity.

Environmental Issues: Pollution; food security; deforestation; conservation of wildlife.

Recommended Readings

1. Agarwal, A. et.al.: The Citizen's Fifth Report, Centre for Science and Environment, New Delhi, 1999.
2. Chandna, R.C.: A Geography of Population, Kalyani Publishers, Ludhiana, 1996.
3. Chawla, I.N.: Geography of Resources, Bharat Prakashan, Jalandhar, latest edition.
4. Hartshorne Truman A and W. Alexander: Economic Geography, Prentice Hall, 1988, 3rd John Edition.
5. Kates, R.W. & Burton, I (Eds.): Geography, Resources and Environment, Vol. I & II, University of Chicago Press, Chicago, 1986.
6. Naresh Kumar: Environmental Studies, Sharma Publishers, Jalandhar.
7. Trewartha, G.T.: A Geography of Population— World Patterns. John Wiley and Sons, New York, 1969.
8. Zelinsky, Wilbur: A Prologue to Population Geography, Prentice Hall, New Jersey, 1966.
9. Zimmerman E.W.: World Resources and Industries, Harpar, New York.
10. Chandna, R.C.: Environmental Awareness Kalyani Publishers, Ludhiana.
11. Chawla. I.N., Resources & Environmental Bharat Publishers, Jalandhar.

PHYSICAL EDUCATION-III (PRACTICAL)

Course Code	PED269
Course Title	Physical Education-III (Practical)
Type of Course	Practical
L T P	0:0:2
Credits	1
Course pre-requisite	NA

- I. Division of Marks: Athletics (12) + Games (12) +Ground Markings (3+3),
- II. Practical Note Book (5), Viva-Voce (5)
- III. Athletics Performance ----- 200M, Long Jump, Javelin Throw
- IV. Games (Boys &Girls) ---- Fundamentals, Rules, Performance
- V. Badminton
- VI. Baseball



MUSIC VOCAL-III (PRACTICAL)

Course Code	MUC263
Course Title	Music Vocal –III (Practical)
Type of course	Practical
L T P	0:0:4
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to understand the need, content and process and basic guidelines of music. 2. The students will be able to develop right understanding for music. 3. The students will be able to realize the significance of music.

List of Practical

- I. Bupali, aheerbhaiav, bharavi
- II. Talas: chautal, rupak, ghaptal
- III. One shabad
- IV. One folk song
- V. One Gazal
- VI. One tarana of any ragas
- VII. Sing with tanpura
- VIII. Knowledge of one vilamvatkiyal

Text and Reference Books:

S. No.	Author(S)	Title	Publisher
1	Devinderkaur	Sangeet roop	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Shanti goverdhan	Sangeet darpan	Howdery Roshan Press

GEOGRAPHY (PRACTICAL)

Course Code	GEO263
Course Title	Geography (Practical)
Type of Course	Practical
L T P	3:0:2
Credits	1
Course Requisite	10+2
Course Objectives (CO)	<ul style="list-style-type: none"> • To introduce the fundamentals, history, and principles of remote sensing, including the electromagnetic spectrum and its interaction with the Earth's surface and atmosphere. • To familiarize students with remote sensing data acquisition methods such as aerial photography, satellite imagery, and digital data products. • To develop skills in constructing and interpreting statistical diagrams, graphs, and columnar diagrams for geographical analysis. • To enhance the ability to read and interpret topographical maps, understanding their significance in geographical studies, with a focus on different terrains in India.
Course Outcomes	<p>CO1: To introduce the principles of remote sensing, its historical development, and data acquisition methods, including aerial photography and satellite imagery.</p> <p>CO2: To develop skills in constructing and interpreting statistical diagrams, graphs, and columnar diagrams for geographical analysis.</p> <p>CO3: To enhance the understanding and interpretation of topographical maps, emphasizing their significance in geographical studies.</p>

UNIT I

Fundamentals of Remote Sensing

Introduction and history of development of Remote Sensing

Electro-magnetic spectrum: Basic principles, properties and interaction with earth surface and atmosphere.

UNIT II

Remote sensing data acquisition: Aerial photograph, Satellite Imagery and other digital data products.

UNIT III

Construction and Significance of the following:

Statistical Diagrams: Linear, Bars and Pie, wind rose.

Columnar Diagrams: Simple,superimposed, composite.

Graphs: Line graphs, Climograph, hythergraph, ergograph.

UNIT IV

Topographical Maps: Significance of topographical maps in geographical studies.

Study and Interpretation of topographical Maps of India (two sheets: one representing a hilly/mountainous tract and the other a plain tract).

Essential Readings:

- Bhatta, Basudeb, 2020: *Remote Sensing and GIS*, 3rd Edition, Illustrated, Oxford University Press.
- Joseph, George & Jeganathan, C., 2024: *Fundamentals of Remote Sensing*, 3rd Edition, Telangana Universities Press.

Further Readings:

- Burrough, P.A., 1986: Principles of Geographical Information Systems in Land Resources Assessment
- Campbell, J.B., Introduction to Remote Sensing, (2nd ed.), Taylor and Francis, London, 1996.
- Curran, P., Principles of Remote Sensing, Longman, London, 1985.
- Fazal S., Remote Sensing Basics, Kalyani Publishers, New Delhi, 2009.
- Jenson, J.R., Remote Sensing and Environment. Pearson India, 2013.
- George., Fundamentals of Remote Sensing, (2nd ed.) University Press, Hyderabad, 2005.
- Lillesand T.M and Keifer R.W., Remote Sensing and Image Interpretation (6th ed.) John Wiley and Sons, New York, 2008.



Introduction to Indian Knowledge System

Course Code	IKS261
Course Title	Introduction to Indian Knowledge System
Type of Course	DSE
L T P	4:0:0
Credits	4
Course Objectives	1. To Recognize the sources and concept of Indian knowledge system. 2. To Describe the Indus Valley Civilization.
Course Outcomes	Students will be able to: 1. To Recognize the sources and concept of Indian knowledge system. 2. To Describe the Indus Valley Civilization.

UNIT-I

Definition, Concept and Scope of Indian Knowledge System

UNIT-II

Indian Knowledge System in ancient India and in modern India

UNIT- III

Indus Valley Civilization

UNIT- IV

Myths, Rituals, Spirituals, Taboos and Belief System, Folk Stories, Songs

Text books:

1. Kapoor, K. (2021), Indian Knowledge System: Nature, Philosophy, Character in Indian Knowledge System, vol. 1, Pub. Indian Institute of Advanced Studies, Shimla
2. Textbook on The Knowledge System of Bhārata by Bhag Chand Chauhan,
3. History of Science in India Volume-1, Part-I, Part-II, Volume VIII, by Sibaji Raha, et al. National Academy of Sciences, India and The Ramkrishan Mission Institute of Culture, Kolkata (2014).

Reference Books:

1. Pride of India- A Glimpse of India's Scientific Heritage edited by Pradeep Kohle et al. Samskrit Bharati (2006).
2. Vedic Physics by Keshav Dev Verma, Motilal BanarsiDass Publishers (2012).
3. India's Glorious Scientific Tradition by Suresh Soni, Ocean Books Pvt. Ltd. (2010).

ENGLISH (Minor)

CourseCode	ENG 261
CourseTitle	Literary Readings and Language Practice in English
Typeofcourse	Minor
LTP	4:0:0
Credits	4
Courseprerequisite	NA
Course Objectives(CO)	<p>4. To familiarize the students with major authors, works, genres.</p> <p>5. To inculcate the ability to read, write, and think critically.</p> <p>6. To enable them to use transcription conventions appropriately when transcribing words</p>

UNIT-I

Animal Farm by George Orwell— Detailed analysis of the complete text, use of allegory and satire, discussion on plot, rhetoric, technique of repetition, characterization and use of humour.

UNIT-II

Fresh Showers: Belinda's Toilet, London, The Tables Turned, Man and Nature, The Cloud, Voices, Futility, Day Break, Self's the Man, Spinster,

UNIT-III

New Directions- Part 1

UNIT-IV

Transcription of following words: agony, antonym, capable, committee, decorum, aeroplane, calendar, privacy, absolute, academy, academic, advertisement, adversity, allopathic, mathematics, automobile, biography, biology, competition, competitive, certificate, certify, democracy, capacity,

New Directions- Part 2

Texts & Recommended Books:

S.No.	Author(S)	Year	Title	Publisher
1	George Orwell	2001	Animal Farm	Penguin Books India
2	G.N.D.U. Amritsar	2004	Fresh Showers	G.N.D.U. Amritsar
3	Peter S. Gardiner		New Directions 2 nd edn.	CUP
4	J.D.O'Connor.	2008	Better Pronunciation of English	CENGAGE Learning Publishers

Course Code	PBI263
Course Title	Punjabi Elective-III (ਪੰਜਾਬੀ ਗੱਦ ਸਾਹਿਤ)
Type of Course	Theory / Minor
L T P	4:0:0
Credits	4
Course Prerequisite	N.A
Course Objectives	<ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਵੀਆਂ ਦੀ ਜੀਵਨੀ ਤੋਂ ਜਾਣੂ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਵਿਤਾ ਦੀ ਵਿਸ਼ੇਗਤ ਜਾਣਕਾਰੀ ਹੋ ਜਾਵੇਗੀ। ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੀਆਂ ਵੱਖ-ਵੱਖ ਵਿਧਾਵਾਂ ਨੂੰ ਮਾਨਣਯੋਗ ਹੋ ਜਾਣਗੇ। ਵਿਦਿਆਰਥੀਆਂ ਵਿੱਚ ਪੰਜਾਬੀ ਕਹਾਣੀ ਦਾ ਅਲੋਚਨਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਦਾ ਹੁਨਰ ਉਤਪੰਨ ਹੋਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦਾ ਵਿਸ਼ਲੇਸ਼ਣਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਯੋਗ ਹੋ ਜਾਣਗੇ।

ਭਾਗ-ਉ

ਵਾਰਤਕ ਅਤੇ ਗਲਪ ਸਾਹਿਤ ਰੂਪ: ਸਿਧਾਂਤ, ਪ੍ਰਕਿਰਤੀ ਅਤੇ ਤੱਤ

ਭਾਗ-ਅ

ਕਥਾ ਕਹਾਣੀ

ਭਾਗ-ਈ

ਸੱਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ (ਨਿਬੰਧ ਸੰਗ੍ਰਹਿ) -ਪਹਿਲੇ 6 ਨਿਬੰਧ

ਭਾਗ-ਸ

ਸੱਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ (ਨਿਬੰਧ ਸੰਗ੍ਰਹਿ) -ਬਾਕੀ 6 ਨਿਬੰਧ

ਪਾਠ ਅਤੇ ਹਵਾਲਾ- ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਪੁਸਤਕ	ਪਬਲਿਸ਼ਰਜ਼
ਡਾ. ਰਤਨ ਸਿੰਘ ਜੱਗੀ	ਸਾਹਿਤ ਦੇ ਰੂਪ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ ਸੈਣੀ	ਵਾਰਤਕ ਸਿਧਾਂਤ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
(ਸੰਪਾਦਕ) ਸਿੰਘ, ਰਘਬੀਰ ਅਤੇ ਸਿੰਘ, ਦਰਬਾਰਾ	ਕਥਾ ਕਹਾਣੀ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ
(ਸੰਪਾਦਕ) ਬਾਜਵਾ, ਰ. ਸਿੰਘ ਅਤੇ ਰੰਧਾਵਾ, ਵ. ਸਿੰਘ	ਸੱਭਿਆਚਾਰ ਅਤੇ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ

MUSIC VOCAL-III (THEORY)

Course Code	MUC265
Course Title	Introduction to Indian Music Vocal
Type of course	Minor
L T P	2:0:0
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ul style="list-style-type: none"> 3. The students will be able to develop right understanding for music. 4. The students will be able to realize the significance of music.
Course Outcomes	The students will be able to understand the need, content and process and basic guidelines of music.

UNIT-I

Classification of the instruments used in Gurmat Sangeet.

Defination of following: khatha, Kan, murki, andolan

UNIT-II

Define and explain the nature of Music

Essey of the following: folk music of panjab.

UNIT-III

Understanding of the musical concepts.

Varieties of Tanas.

Merit and Demerits of a singer.

UNIT-IV

Life-sketches and contribution UstadFaiyaz Khan, Swami Haridas, UstadVallyat Hussain Khan.

Understanding of the musical concepts.

Role of Radio and TV in music.

Describe: Nad, Savar, Shruti Gram, SankiranNiam, Tal.

Text and Reference Books:

S. No.	Author(S)	Title	Publisher
1	Devinder kaur	Sangeet roop	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Shanti goverdhan	Sangeet darpan	Howdery Roshan Press

Contemporary issues in India

Course Code	ECO263
Course Title	Contemporary issues in India
Type of Course	Minor /Theory
LTP	4:0:0
Credits	4
Course Pre-requisite	NA
Course Objective	<ol style="list-style-type: none"> 1. To make the students understand the development process of Indian economy since independence. 2. To introduce the sector-specific policies and their impact on key economic indicators. 3. To acquaint the students with the impact of planning and economic reforms in India.
Course Outcomes	<ol style="list-style-type: none"> 1. Students will understand the process of development in India. 2. Students will examine demographic features of Indian economy and direction and composition of foreign trade. 3. Students will comprehend the growth of national income, planning process and economic reforms in India.

Section A

Indian Economy on the Eve of Independence: Introduction: Low Level of Economic Development, Occupational Structure and Demographic Position. Introduction, the Goals of Five-Year plans and its critical Evaluation; NITI Aayog, NDC-Composition and functions

Section B

Economic Reforms: Liberalization, Privatization and Globalization and its assessment,

Industry: Performance and problems of industrial development, Public sector Versus Private sector, Role of Privatisation

Agriculture: Nature and Importance, Causes of decline in productivity, green revolution and New Agriculture Strategy

Section C

Rural Development: Meaning, Institutions that cater to Rural Development like Panchayats, NABARD, Commercial Banks, Co-operatives, Regional Rural Banks and Other Ancillary Sources of Finance

Major economic problem: unemployment, poverty, inflation etc.

Section D

Development Experience of India: comparison with neighbours India and Pakistan India and China
Issues: economic growth, population, sectoral development and other Human Development Indicators

Text and Reference books

S.NO.	Author(S)	Title	Publisher
1.	Puri, V.K.and S.K.Mishra	Indian Econ	Himalaya Publishing House (latest edition).
2.	Kapila, Uma,	Indian Economy since Independence	Academic Foundation (latest edition).
3.	Dhingra, I.C	The Indian Economy: Environment and Policy	ultan Chand and Sons, New Delhi (latest edition).

Note: Students must evaluate reports published by,MoSPI,Niti Aayog, PIB ,RBIetc..



Course Code	GEO265
Course Title	Natural Hazards and Disaster Management
Type of Course	Minor
L T P	4 0 0
Credits	4
Course Objectives (CO)	<ol style="list-style-type: none">The course aims to enable students to understand the fundamental concepts of hazard, risk, vulnerability, and disaster, along with the types and classifications of nature-induced disasters such as earthquakes, floods, cyclones, and cloudbursts.Students will be able to identify and analyze various human-induced disasters, including nuclear, chemical, biological, and industrial hazards, as well as global warming and epidemics.The course aims to equip students with knowledge of disaster management principles, approaches, and phases—covering the pre-disaster, emergency, and post-disaster periods.
Course Outcomes	<p>CO1: To understand the key concepts of hazard, risk, vulnerability, and disaster, and classify different types of nature-induced disasters</p> <p>CO2: To analyze the causes, characteristics, and impacts of human-induced disasters including nuclear, chemical, biological, and climate-related events.</p> <p>CO3: To apply the principles, phases, and approaches of disaster management in real-life scenarios for effective disaster response and mitigation.</p> <p>CO4: To evaluate the disaster management mechanisms in India, particularly the roles and functions of national agencies like the National Disaster Management Authority (NDMA).</p>

UNIT-I

Definition and Concept of Hazard, Risk, Vulnerability and Disaster, Types and classification of Disasters.

Nature Induced Disasters: Earthquakes, Floods, Cyclones and Cloud burst; Avalanches, Forest Fire and Tsunami

UNIT-II

Human Induced Disasters: Nuclear, Chemical and Industrial Disasters; Global warming; Biological Disasters; Epidemics

UNIT-III

Disaster Management: Meaning, Concepts, Approaches, Principles, Objectives and Scope; Concepts relating to the Pre-disaster phase, emergency phase, post-disaster phase.

UNIT-IV

Disaster Management Mechanism in India: Agencies-National Disaster Management Authority-Plans and Policies.

Recommended Readings

1. B.K. Khanna: Disasters: All You Wanted to Know About, New India Publishing Agency, New Delhi, 2005.
2. Bryant Edwards: Natural Hazards, Cambridge University Press, U.K, 2005.
3. Hyndman, D. and D. Hyndman: Natural Hazards and Disasters. 2nd edition. USA, Belmont: Brooks/Cole, 2009.
4. Coppola, D.P.: Introduction to International Disaster Management, 3rd Edition. UK, Butterworth-Heinemann/Elsevier, 2015.

Further Readings:

1. Gupta, M.C., Gupta, L.C., Tamini, B.K., Sharma, Vinod, K. (2000), Manual on Natural Disaster Management in India, National Disaster Management Centre, New Delhi.
2. Kasperson, J.X., Kasperson, R.E. and Turner, B. L. (1995), Regions at Risk : Comparisons of Threatened Environments, United Nation University Press, Tokyo.
3. Mitchell, J.K. ed. (1999), Crucibles of Hazard : Mega-Cities and Disasters in Transition, United Nations University Press, New York.
4. Quarantelli, E.L. ed. (1998), What is a Disaster? Perspective on the Question, Routledge, London.
5. Schneid, T. and Collins, L. (1998), Disaster Management and Preparedness, Lewis Publishers, Washington, D.C.
6. Godschalk, D.R. et.al. (1999), Natural Hazard Mitigation: Recasting Disaster Policy and Planning, Island Press, Washington, D.C.

History of Modern India

CourseCode	HIS263
CourseTitle	History of Modern India
TypeofCourse	Minor
L T P	4 0 0
Credits	4
Course Pre-requisite	Nil
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The paper is a study of British colonialism in which India will be studied as a classic case of British Imperialism. 2. The construction of the colonial state in north and south India followed constitutional changes which further enhanced to establish British control. 3. Indian nationalism responded starting with peasant and tribal revolts, mutiny of 1857.
Course Outcomes	<p>On Completion of This Course the Students are able to:</p> <ol style="list-style-type: none"> 1. Acquaint students about the increasing dominance of British colonialism in post Mughal period. 2. They are familiar with the first war of independence of 1857. 3. They are awakened about socio-economic, political and cultural changes during British regime. 4. They introduced with important historical places of Modern India on map.

Unit I

Coming of the Europeans; Portuguese, Dutch, French and British.

Unit-II

Foundation of British Rule: Circumstances leading to the battles of Plassey and Buxar and their significances.

Unit III

Growth of modern education, Commercialization of Agriculture; rural indebtedness, Development in transportation.

Unit IV

Revolts of 1857; causes, events, nature, characteristics.

Text Books and References:

S.No.	Author(S)	Title	Publisher
1	Bipan Chandra	History of Modern India	Orient Longman, Hyderabad,
2	Sumit Sarkar	Modern India (1885-1947)	
3	A.C. Bannerjee	The New History of Modern India (1707-1947),	K.P. Bagchi, Calcutta, 1983.
4	M.K. Chaudhuri	Trends of Socio-Economic Change in India (ed.), (1871-1961), IIAS,	Simla, 1969.





Indian Knowledge System: History of the Punjab A.D.1469-1708

Course Code	HIS262
Course Title	History of the Punjab A.D. 1450-1708
Type of Course	Theory (Core Course)
L T P	4 0 0
Credits	4
Course Pre-requisite	Nil
Course Objectives (CO)	<ol style="list-style-type: none"> 1. This paper aims to examine the politico-administrative, social and religious milieu of Guru Nanak in order to understand his response to the contemporary environment and the foundation of Sikh movement. 2. It also deals with growth of Sikh movement under his first four successors, the phase of confrontation with Mughal state and its culmination under Guru Gobind Singh.
Course Outcomes	<p>On Completion of This Course the Students are able to:</p> <ol style="list-style-type: none"> 1. Understand the importance of the history of Punjab. 2. Know about the origin of the Sikh panth, ten gurus and Khalsa Panth also introduced by the important historical places of Punjab on map.

Unit I

Guru Nanak; teachings and travels, New institutions established by Guru Nanak with special reference to Sangat, Pangat and Langer. Emergence and contribution of the Udasi sect.

Unit II

Evolution of Sikhism from Guru Angad Dev to Guru Arjan Dev; The Adi Granth and its importance; Martyrdom of Guru Arjun Dev

Unit III

Transformation of Sikhism under Guru Hargobind, New Policy of Guru Hargobind Singh, Its Causes, Significance, Circumstances leading to the martyrdom of Guru Teg Bahadur,

Unit IV

Creation of the Khalsa Panth and its significance and achievement and personality of Guru Gobind Singh Ji.

Punjab Map: - Important historical Places of Punjab: Anandpur Sahib, Ropar, Sirhind, Lahore, Amritsar, Goindwal Sahib, Tarntarn.

Text Books and References:

S.No.	Author(S)	Year	Title	Publisher
1	Dr. Ganda Singh and Teja Singh	1989	<i>A short History of Sikhs</i>	Punjabi University
2	J.S. Grewal	1999	<i>The Sikhs of the Punjab</i>	Cambridge University Press
3	Kushwant Singh	1963	<i>A History of the Sikhs</i>	Oxford Publishers
4	A.C. Arora	2017	History of Punjab 1439-1799	Pardeep Publications

POLITICAL SCIENCE-IV (Western Political Thought)

COURSE CODE	PLS262
COURSE TITLE	Western Political Thought
L.P.T	4:0:0
COURSE OBJECTIVES	This Course is a first part of the two Core courses designed to train students in interpreting major classical texts of Western Political thought. The structure of the course is a schema of key texts with an intention to introduce students to the original texts and make them aware of different ways of interpreting the texts of Western Political Thought. The part of the objective is to guide them towards understanding the major theoretical puzzles that engaged the philosophers and theorists of the world particularly the West. The students are expected to read the <i>selected</i> texts and in some cases <i>selected excerpts</i> of the texts wherever specified.
LEARNING OUTCOME	<p>1. Learning Outcomes: The Course is intended to achieve mainly following objectives:</p> <ul style="list-style-type: none"> a) Make students familiar with major approaches of understanding and of Western Political thought and Political Philosophy; b) Engage with key ideas and concepts developed by the major philosophers of the discipline; c) Critical appreciation of the Key Texts by becoming training of examining structural formation of arguments, methods and positions of philosophers; and d) Take footing in investigating arguments from different theoretical positions

UNIT-I

Plato

1. Ideal State: Concept and Features
2. Theory of Justice
3. Idea of Philosopher King
4. Communism of Property and wives.

Aristotle

1. Concept of Revolution
2. View of Slavery
3. Classification of Government

Unit II:

Machiavelli

1. Views on State Craft
2. Machiavelli's Secularism

Thomas Hobbes

1. State of Nature
2. Social Contract
3. Theory of Sovereignty

John Locke

1. Social Contract
2. Concept of Natural Rights
3. Concept of Conditional Government

UNIT-III

J.J Rousseau

1. Views on State of Nature
2. Concept of General Will

Jeremy Bentham

1. Bentham as Utilitarian

John Stuart Will

1. Concept of Liberty
2. Representative Government

UNIT-IV

GEORGE WILHELM FRIEDRICH HEGEL

1. Dialectical Method
2. Use of Dialectical Method
3. Philosophy of History
4. Theory of State

Karl Marx

1. Concept of Class and State
2. Concept of Historical Materialism

SUGGESTED READINGS'.

- S. Mukherjee and S. Ramaswamy, A History of Political Thought: Plato to Marx, New Delhi, Prentice Hall, 1999.
- Sir E. Barker, Greek Political Theory: Plato and his predecessors, New Delhi, B. I. Publications 1964.
- Sir E. Barker, The Political Thought of Plato and Aristotle, New York, Dover Publications, 1958.
- Wayper, Political Thought; New York: English University Press; 1954
- G.H. Sabine History of Political Theory (New Delhi: Oxford and I.B.H., 1968)
- Brian R. Nelson Western Political Thought (New Delhi: Pearson Education, 2006)
- Andrew Heywood: An Introduction to Political Theory (New Delhi: Palgrave Publications, 2004)
- 1.Jeremy Bentham: Fragments on Government and the Principles of Morals and Legislation
- J.S. Mill (a) On Liberty (b) Essay on Representative Government
- O.P Gauba "Western Political Thought" Mayur Paperback; 2016th edition (1 January 2017)

PHYSICAL EDUCATION-IV (THEORY)

Course Code	PED268
Course Title	Physical Education-IV (Theory)
Type of Course	Theory
L T P	3:0:0
Course Objectives	<ol style="list-style-type: none"> 1. Gain knowledge about transfer of training. 2. Explain the Learning and laws of learning. 3. Understand the play theories.
Course Outcomes	<p>After the completion of the course, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand the various theories of physical education. 2. Explain the historical development in India. 3. Gain knowledge of weight management, BMI and obesity.

UNIT-I

Indus Valley Civilization Period. (3250 BC – 2500 BC), Vedic Period (2500 BC – 600 BC)

Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval Period (1000 AD – 1757 AD), Physical Education in India (After 1947), Contribution of Akhadas and Vyayamshals, Y.M.C.A. and its contributions

UNIT-II

Meaning of weight management Concept of weight management in modern era factor affecting weight management and values of weight management.

Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss.

Obesity –Definition, meaning and types of obesity, Health Risks Associated with Obesity, Obesity - Causes and Solutions for overcoming obesity.

UNIT-III

Play meaning and theories. Meaning of circuit training and its types, Psychological characteristics of the adolescent in sports situations

UNIT-IV

Meaning of Learning, Nature of Skill Learning and laws of Learning, Learning Curve, Preparation of pre-competition

Text-Books—

S. No.	Author(S)	Year	Title	Publisher
1	R.D. Kansal	2015	Physical Education and Sports	Kalyani Publishers Ludhiana

Reference Books—

S. No.	Author(S)	Year	Title	Publisher
1	Singh Kanwaljit & Singh Inderjeet	2000	Sports Sociology	Friends Publication New Delhi
2	Tandon, D.K.	2001	Scientific basis of Physical Education	Friends Publication New Delhi
3	Singh Ajmer and Gill Jagtar	2004	Essentials Physical Education	Kalyani Publishers Ludhiana
4	Kang G.S.	2000	Anatomy, Physiology and Health Education	Publication Bureau, Punjabi Uni. Patiala
5	Kang G.S. and Deol, N.S.	2008	Health and Physical	21 st Century, Patiala,

		Education	2008
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ENGLISH (ELECTIVE)-IV

Course Code	ENG262
Course Title	English (Elective)-IV
Type of course	Theory
L T P	4:0:0
Credits	4
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none">1. Students will demonstrate familiarity with major authors, works, genres2. Students will demonstrate the ability to read, write, and think critically3. Students will use transcription conventions appropriately when transcribing words

UNIT I

Modern Prose—Essays at serial No. 3, 4, 5, 7, 11, 12

UNIT II

Dispelling Silence—Stories at serial No. 1, 2, 6, 7, 8, 10, 11, 12

UNIT III

New Directions (Part 4-5)

UNIT IV

Words for Transcription: accommodation, appreciation, capability, civilization, examination, pronunciation, university, terminology, utility, nationality, objectionable, rationality, testimonial, vocabulary, superintendent, satisfactory, rehabilitate, consultation, dictionary, veterinary, espionage, singularity, tranquility, interference, pavilion, superiority.

Texts & Recommended Books:

S.No.	Author(S)	Year	Title	Publisher
1	G.N.D.U. Amritsar	2001	Modern Prose	G.N.D.U. Amritsar
2	G.N.D.U. Amritsar	1991	Dispelling Silence: Short Stories	G.N.D.U. Amritsar
3	Abrams, M.H.	2008	Glossary of Literary Terms	Wadsworth CENGAGE Learning Publishers
4.	Gardener S. Peter	2009	New Directions	Cambridge University Press

PUNJABI (ELECTIVE) IV (ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ)

Course Code	PBI262
Course Title	Punjabi Elective-IV(ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ)
Type of Course	Theory
LT P	4:0:0
Credits	4
Course Prerequisite	N.A
Course Objectives	<ol style="list-style-type: none"> ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਸਾਹਿਤ ਤੋਂ ਜਾਣੂ ਹੋ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਵੱਖ-ਵੱਖ ਰੂਪਾਂ ਦੀ ਪ੍ਰਕਿਰਤੀ ਸਮਝ ਜਾਣਗੇ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਲੋਚਨਾ ਪ੍ਰਣਾਲੀ ਦੇ ਮੂਲ ਸੰਕਲਪਾਂ ਸੰਬੰਧੀ ਗਿਆਨ ਹੋ ਜਾਵੇਗਾ। ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਵਿਕਾਸ ਦਾ ਵਿਸ਼ਲੇਸ਼ਣਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਯੋਗ ਹੋ ਜਾਣਗੇ।

ਭਾਗ-ਓ

ਸਾਹਿਤ ਰੂਪ: ਵਾਰ, ਜੰਗਨਾਮਾ, ਕਿੱਸਾ ਅਤੇ ਕਾਫ਼ੀ (ਪਰਿਭਾਸ਼ਾ, ਪ੍ਰਕਿਰਤੀ ਅਤੇ ਤੱਤ)

ਭਾਗ-ਅ

ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ: ਸੂਫ਼ੀ ਕਾਵਿ

ਭਾਗ-ਈ

ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ: ਕਿੱਸਾ ਕਾਵਿ

ਭਾਗ-ਸ

ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ: ਬੀਰ ਕਾਵਿ

ਪਾਠ ਅਤੇ ਹਵਾਲਾ ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਸਾਲ	ਪੁਸਤਕ	ਪਬਲਿਸ਼ਰਜ਼
(ਸੰਪਾਦਕ) ਹਰਜਿੰਦਰ ਸਿੰਘ ਛਿੱਲੋਂ ਅਤੇ ਨਰਜੀਤ ਸਿੰਘ ਖਹਿਰਾ	2013	ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ	ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ
ਡਾ. ਰਤਨ ਸਿੰਘ ਜੱਗੀ	2018	ਸਾਹਿਤ ਦੇ ਰੂਪ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ

MUSIC VOCAL- IV (THEORY)

Course Code	MUC262
Course Title	Music Vocal –IV (Theory)
Type of course	Theory
L T P	2:0:0
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to develop right understanding for music. 2. The students will be able to realize the significance of music.
Course Outcomes	The students will be able to understand the need, content and process and basic guidelines of music.

UNIT-I

Historical Study of Indian Music Descriptive & Comparative study of the following gayanshaliies: Drupad – DhamarKajri – Hori Saadra – Daadra Thumri – Tappa Drut Khayal – Tarana

UNIT-II

Biography and contribution toward Indian Music of the following viz. Pt. Rajan-Sajan Mishra, Pt. Bhimsen Joshi, Pt. Jasraj, Smt. KishoriAmonkar. Historical Development of VrindGaan in Vocal Music. Salient feature of Gurmat sangeet. Folk Music of Punjab.

UNIT-III

Historical development of solo singing and its place in Modern period.

Changing scenario in music after Independence. Different gayanshaliies of Gurmat Sangeet.

UNIT-IV

Shruti SwarSthapna on Veena by Pt. Ahobal, Pt. Srinivas, Acharya Brihaspati & Dr.Lalmani Mishra. Text and Reference Books:

S. No.	Author(S)	Title	Publisher
1	Dr. Arun Mishra	BhartiaKanth Sangeet	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Pt. Debu	On Indian Music	Howdery Roshan Press

ECONOMICS-IV (Public Finance)

Course Code	ECO262
Course Title	ECONOMICS-IV (Public Finance)
Type of Course	Major /Theory
LTP	4:0:0
Credits	4
Course Pre-requisite	NA
Course Objective	<p>1. To enable the students to understand the basics of public finance and international trade.</p> <p>2. Introduce students to the primary functions of government to generate resources from the people and to spend money improving their lives..</p>
Course Outcomes	<p>On completion of the course students would be able to:</p> <p>1. Evaluate the basics of public finance</p> <p>2. Analyse the primary functions of government to generate resources from the people and to spend money improving their lives.</p>

UNIT-I

Introduction to Public Finance: Nature, Scope and its Importance. Public Expenditure: Canons, Principle of Maximum Social Advantage, Wagner's Law, peacock Wiseman Hypothesis. Causes for the Recent Growth of Public Expenditure in India. Taxation: Classification and Canons, Characteristics of a Good Tax System.

UNIT-II

Incidence and Impact of Taxation, Demand and Supply Theory. Taxable Capacity: Absolute and Relative Capacity, Determinants of Taxable Capacity. Public Debt: Its types and Role, Burden of debt and Methods of its Redemption. Deficit Financing: Objectives and Limitations.

Unit III

Public budgets: kinds of budget, programme budgeting and zero-base budgeting; different concepts of budget deficits, budget of Union Government in India.

A critical review of recent budget and Economic Survey

Unit IV

Fiscal federalism –Criteria for resource transfer from Union to States, Centre-State financial relations in India, recommendations of the latest Finance Commission. Fiscal policy – objectives, interdependence of monetary and fiscal policies.

Text Book And References

Author(S)	Title	Publisher
Musgrave, A.R. & Musgrave, P. B	Public Finance in Theory and Practice	McGraw Hills, International Students' Edition
Kindleberger, C. P	International Economics	Richard Irwin Homewood, Illinois, Indian Edition
Bhatia, H.	Public Finance	Vikas Publishing House Pvt. Ltd
Dalton, H	Principles of Public Finance	Routledge and Kegan Paul, Londo

MATHEMATICS-IV

Course Code	MAT262
Course Title	Mathematics-IV
Type of course	Theory
L T P	6:0:0
Credits	6
Course prerequisite	NA
Course Objective (CO)	<p>1. To provide the excellent training in scientific data collection, management, methods and procedures of data analysis moreover it deals with the relationship of operations on linear transformation and corresponding matrices.</p>
Course Outcomes	<p>1. Students will have a working knowledge of important mathematical concepts in abstract algebras such as definition of a group, order of a finite group and order of an element.</p> <p>2. Students will be knowledgeable of different types of subgroups such as normal subgroups, cyclic subgroups and understand the structure and characteristics of these subgroups.</p> <p>3. Students will see and understand the connection and transition between previously studied mathematics and more advanced mathematics.</p>

UNIT-I

Linear Algebra: Vector spaces, subspaces, algebra of subspaces, quotient spaces, linear combination of vectors, linear span, linear independence, basis and dimension, dimension of subspaces. Linear transformations, null space, range, rank and nullity of a linear transformation, matrix representation of a linear transformation, algebra of linear transformations. Isomorphisms, Isomorphism theorems, invertibility and isomorphisms, change of coordinate

Matrix.

UNIT-II

Statistical Methods: Random variables: Discrete and continuous random variables, p.m.f., p.d.f. and c.d.f., illustrations of random variables and its properties, expectation of random variable and its properties. Moments and cumulants, moment generating function, cumulants generating function and characteristic function. Transformation in univariate and bivariate distributions. Bivariate probability distributions; marginal and conditional distributions; independence of variates (only general idea to be given).

UNIT-III

Application of sampling Distributions: Point (or degenerate), binomial, Poisson, Geometric, negative binomial, Hypergeometric, Normal, Uniform, Exponential, Beta and Gamma distributions. Statement and application of Chebychev's inequality, WLLN and SLLN, Central limit theorem (CLT) for I.i.d. variates, and its applications. DeMoivre's Laplace Theorem.

UNIT-IV

Mathematical Programming Unconstrained and constrained optimization problems. Types of extrema and their necessary and sufficient conditions. Convex functions and their properties. Kuhn-Tucker optimality conditions. Quadratic Programming. Wolfe's Method.

Recommended books: -

S. No	Name	Author(S)	Publisher
1	Linear Algebra	Stephen H. Friedberg, Arnold J. Insel, Lawrence E. Spence	4th Ed., Prentice-Hall of India Pvt. Ltd., New Delhi, 2004.
2	Fundamentals of Mathematical Statistics	S.C. Gupta and V.K. Kapoor	11th Ed., Sultan Chand and Sons, 2007
3	Numerical Optimization with Applications	S. Chandra, Jayadeva, Aparna Mehra	Narosa Publication House, 2009.



GEOGRAPHY-IV

Course Code	GEO262
Course Title	Geography of Punjab
Type of Course	Theory
L T P	3 0 0
Credits	3
Course Requisites	Nil
Course Objectives (CO)	<ul style="list-style-type: none"> • To provide an understanding of the geographical setting, physical features, and natural resources of Punjab, including relief, climate, soils, vegetation, and mineral resources. • To analyze the demographic and economic aspects of Punjab, including population dynamics, agricultural development, industrialization, and transportation networks. • To examine the regional divisions of Punjab—Majha, Doaba, and Malwa—highlighting their unique geographical and socio-economic characteristics.
Course Outcomes	<p>CO1: To understand the geographical evolution, physical features, and natural resources of Punjab, including its relief, climate, and vegetation.</p> <p>CO2: To analyze the population distribution, agricultural patterns, industrial development, and transportation networks of the state.</p> <p>CO3: To examine the regional divisions of Punjab—Majha, Doaba, and Malwa—focusing on their distinct geographical and socio-economic characteristics.</p>

UNIT I

Location, Evolution of the State, Administrative Divisions.

Relief, Drainage, Climate, Soils, Vegetation, Mineral and Power Resources.

UNIT II

Population: Numbers, distribution, density, growth (birth rate, death rate and migration), religious composition, urbanization.

Agriculture: Main characteristics including green revolution, irrigation, main crops (wheat, rice, Cotton, sugarcane) and their distribution, agricultural marketing, livestock and dairying, problems of agriculture.

UNIT III

Industries: Main characteristics, distribution pattern of major industries (cotton textile, sugar, hosiery, engineering) industrial concentration, problems of industrialization.

Transport and Trade: Road, rail and their transport; Inter-State trade.

UNIT IV

Regional Geography of Majha, Doaba, Malwa and major characteristics of each region.

Essential Readings:

- Mankoo, Darshan S.: Geography of Punjab, Kalyani Publication, Ludhiana, 2009.
- Mavi, H.S. & Tiwana, D.S.: Geography of Punjab, National Book Trust, Delhi, 1993.
- Singh, Malkit: Geography of Punjab, Reshmeet. Publications, Jalandhar, 2010.

Further Readings:

- Census of India: Punjab: Census Atlas, Vol. XIII, No. IX, 1996.
- Deshpande, C.D.: India: A Regional Interpretation, Northern Book Centre, New Delhi, 1992.
- Gosal G.S. & Gopal Krishan: Regional Disparities in Levels of Socio-Economic Development in Punjab, Vishal Publications, Kurukshetra, 1984.
- Gupta, S.P.: The Punjab: An Overview, Ess Pee Publications, Chandigarh, 2005.
- Singh, Pritam: Punjab Economy: The Emerging Pattern, Enkay Publishers, New Delhi, 1995.
- Singh, R.L., (Ed.): India: A Regional Geography, National Geographical Society of India, 1990, reprint.
- Spate O.H.K. & Learmonth, A.T.A.: India and Pakistan: A General and Regional Geography. Methuen, London, Latest Edition.



PHYSICAL EDUCATION- IV (PRACTICAL)

Course Code	PED270
Course Title	Physical Education-IV (Practical)
Type of Course	Practical
L T P	0:0:2
Credits	1
Course pre-requisite	NA

Marks: 40

- I. Division of Marks: Athletics (12) + Games (12) +Ground Markings (3+3),
- II. Practical Note Book (5), Viva-Voce (5)
- III. Athletics Performance ----- 800M, High Jump for Boys, High Jump for Girls
- IV. Games (Boys & Girls)---- Fundamentals, Rules, Performance
- V. Table Tennis
- VI. Kabbaddi



MUSIC (VOCAL)-IV (PRACTICAL)

Course Code	MUC264
Course Title	Music Vocal-IV
Type of course	Practical
L T P	0:0:4
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none"> 1. The students will be able to understand the need, content and process and basic guidelines of music. 2. The students will be able to develop right understanding for music. 3. The students will be able to realize the significance of music.

List of Practical

- I. Janpuri, asavari, desh
- II. Talas: teental, rupak, talwara
- III. One shabad
- IV. One folk song
- V. One Gazal
- VI. One tarana of any ragas
- VII. Sing with tanpura
- VIII. Knowledge of one vilamvatkiyal

Reference Books:

S. No.	Author(S)	Title	Publisher
1	Devinderkaur	Sangeet roop	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Shanti goverdhan	Sangeet darpan	Howdery Roshan Press

GEOGRAPHY (PRACTICAL)

Course Code	GEO264
Course Title	Geography (Practical)
Type of Course	Practical
L T P	3:0:2
Credits	1
Course Requisite	10+2
Course Objectives (CO)	<ul style="list-style-type: none"> Understand the basic concepts, components, data structures, and applications of GIS, including raster and vector models. Develop skills in satellite image interpretation, land use classification, digitization, and thematic mapping for geographical analysis. Learn various cartographic techniques to represent population, agriculture, and industrial data using point, line, and areal symbols.
Course Outcomes	<p>CO1:Demonstrate an understanding of GIS principles, data structures, and spatial data models for real-world applications.</p> <p>CO 2:Utilize remote sensing techniques for land use classification, river course analysis, and thematic mapping.</p> <p>CO3:Create effective cartographic representations of population, agriculture, and industrial data using appropriate symbols and mapping techniques.</p>

UNIT I

Introduction to GIS Basic concepts: Definition and history, Components of GIS, Recent trends and applications of GIS.

Data structure and formats, Spatial data models – Raster and vector

UNIT II

Interpretation of satellite imagery of different temporal scales

Preparation of land use/ land cover; Image Classification techniques – Unsupervised and Supervised, Digitization of different layers of spatial information (Point, line, and polygon) and their thematic representation

Study of changing land use and river course using remote sensing and GIS techniques

UNIT III

Representation of Geographical Data through:

Point Symbols: Dot, circle, sphere.

Line Symbols: Isopleths and flow lines.

Areal Symbols: Choropleth maps

UNIT IV

Representation of: Population data, Agriculture data and Industrial data by Point symbols, Line symbols and area symbols using the shape file of Punjab or any other region of India.

A-Population data (distribution, density, growth, migration and literacy)

B-Agriculture data (land utilization, distribution of crops, percentage of cropped areas and irrigated areas).

Essential Readings:

- Bhatta, Basudeb, 2020: *Remote Sensing and GIS*, 3rd Edition, Illustrated, Oxford University Press.
- Joseph, George & Jeganathan, C., 2024: *Fundamentals of Remote Sensing*, 3rd Edition, Telangana Universities Press.

Further Readings:

- Burrough, P.A.,1986: Principles of Geographical Information Systems in Land Resources Assessment, Clarendon Press, Oxford.
- Burrough, P.A., and Mc Donnel, R.A.,1998: Principles of Geographical Information Systems, Oxford University Press.
- Gautam, N.C., 1970: Urban Landuse Study through Aerial Photo- interpretation Techniques, Pink Publishing House, Mathura.
- Star, J. and Ester, J., 1990: Geographic Information System, Prentice-Hall.
- Maguire, D. J., Goodchild, M. and Rhind, D. J.,1990: Geographical Information Systems: Principles and Applications, Longman Science and Technology Publications. Robinson
- H., et al., 1995: Elements of Cartography, John Wiley.



Indian Knowledge System

Course Code	IKS262
Course Title	Indian Knowledge System
Type of Course	DSE
L T P	4:0:0
Credits	4
Course Objectives	1. To understand the importance of Vedantic concepts such as Self and ego. 2. To comprehend the dichotomy of Purusha and Prakriti
Course Outcomes	Students will be able to: 1. To Recognize the sources and concept of Indian knowledge system. 2. To Describe the Indus Valley Civilization.

UNIT-I

Introduction to Four Vedas and Vedic life: Its Distinctive Features.

Vedantic view of inner world

UNIT-II

Bhagvat Gita: Self , purusha (of the right eye) and prakriti

UNIT- III

Yoga Way of Life: Relevance to Health and Wellness

UNIT- IV

Consciousness Studies: Body, Mind and Intellect

Text books:

1. Kapoor, K. (2021), Indian Knowledge System: Nature, Philosophy, Character in Indian Knowledge System, vol. 1, Pub. Indian Institute of Advanced Studies, Shimla
2. Textbook on The Knowledge System of Bhārata by Bhag Chand Chauhan,
3. History of Science in India Volume-1, Part-I, Part-II, Volume VIII, by Sibaji Raha, et al. National Academy of Sciences, India and The Ramkrishna Mission Institute of Culture, Kolkata (2014).

Reference Books:

1. Pride of India- A Glimpse of India's Scientific Heritage edited by Pradeep Kohle et al. Samskrit Bharati (2006).
2. Vedic Physics by Keshav Dev Verma, Motilal Banarsi Dass Publishers (2012).
3. India's Glorious Scientific Tradition by Suresh Soni, Ocean Books Pvt. Ltd. (2010).

Literary Readings and Language Practice in English-II

Course Code	ENG264
Course Title	Literary Readings and Language Practice in English-II
Type of course	Minor Theory
L T P	4:0:0
Credits	4
Course prerequisite	NA
Course Objectives (CO)	<p>4. Students will demonstrate familiarity with major authors, works, genres</p> <p>5. Students will demonstrate the ability to read, write, and think critically</p> <p>6. Students will use transcription conventions appropriately when transcribing words</p>

UNIT I

Modern Prose—Essays at serial No. 3, 4, 5, 7, 11, 12

UNIT II

Dispelling Silence—Stories at serial No. 1, 2, 6, 7, 8, 10, 11, 12

UNIT III

New Directions (Part 4-5)

UNIT IV

Words for Transcription: accommodation, appreciation, capability, civilization, examination, pronunciation, university, terminology, utility, nationality, objectionable, rationality, testimonial, vocabulary, superintendent, satisfactory, rehabilitate, consultation, dictionary, veterinary, espionage, singularity, tranquility, interference, pavilion, superiority.

Texts & Recommended Books:

S.No.	Author(S)	Year	Title	Publisher
1	G.N.D.U. Amritsar	2001	Modern Prose	G.N.D.U. Amritsar
2	G.N.D.U. Amritsar	1991	Dispelling Silence: Short Stories	G.N.D.U. Amritsar
3	Abrams, M.H.	2008	Glossary of Literary Terms	Wadsworth CENGAGE Learning Publishers
4.	Gardener S. Peter	2009	New Directions	Cambridge University Press

Program Code: UG011

Introduction to Indian Music Vocal-II

Course Code	MUC266
Course Title	Introduction to Indian Music Vocal-II
Type of course	Minor Theory
L T P	2:0:0
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ul style="list-style-type: none"> 3. The students will be able to develop right understanding for music. 4. The students will be able to realize the significance of music.
Course Outcomes	The students will be able to understand the need, content and process and basic guidelines of music.

UNIT-I

Historical Study of Indian Music Descriptive & Comparative study of the following gayanshaliies: Drupad – DhamarKajri – Hori Saadra – Daadra Thumri – Tappa Drut Khayal – Tarana

UNIT-II

Biography and contribution toward Indian Music of the following viz. Pt. Rajan-Sajan Mishra, Pt. Bhimsen Joshi, Pt. Jasraj, Smt. KishoriAmonkar. Historical Development of VrindGaan in Vocal Music. Salient feature of Gurmat sangeet. Folk Music of Punjab.

UNIT-III

Historical development of solo singing and its place in Modern period.

Changing scenario in music after Independence. Different gayanshaliies of Gurmat Sangeet.

UNIT-IV

Shruti SwarSthapna on Veena by Pt. Ahobal, Pt. Srinivas, Acharya Brihaspati & Dr.Lalmani Mishra. Text and Reference Books:

S. No.	Author(S)	Title	Publisher
1	Dr. Arun Mishra	BhartiaKanth Sangeet	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Pt. Debu	On Indian Music	Howdery Roshan Press

ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ

Course Code	PBI264
Course Title	ਮੱਧਕਾਲੀ ਪੰਜਾਬੀ ਕਾਵਿ
Type of Course	Minor Theory
LT P	4:0:0
Credits	4
Course Prerequisite	N.A
Course Objectives	<p>5. ਵਿਦਿਆਰਥੀ ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਸਾਹਿਤ ਤੋਂ ਜਾਣੂ ਹੋ ਹੋਣਗੇ।</p> <p>6. ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਵੱਖ-ਵੱਖ ਰੂਪਾਂ ਦੀ ਪ੍ਰਕਿਰਤੀ ਸਮਝ ਜਾਣਗੇ।</p> <p>7. ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਲੋਚਨਾ ਪ੍ਰਣਾਲੀ ਦੇ ਮੂਲ ਸੰਕਲਪਾਂ ਸੰਬੰਧੀ ਗਿਆਨ ਹੋ ਜਾਵੇਗਾ।</p> <p>8. ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਵਿਕਾਸ ਦਾ ਵਿਸ਼ਲੇਸ਼ਣਾਤਮਕ ਅਧਿਐਨ ਕਰਨ ਯੋਗ ਹੋ ਜਾਣਗੇ।</p>

ਭਾਗ-ਉ

ਸਾਹਿਤ ਰੂਪ: ਵਾਰ, ਜੰਗਨਾਮਾ, ਕਿੱਸਾ ਅਤੇ ਕਾਫ਼ੀ (ਪਰਿਭਾਸ਼ਾ, ਪ੍ਰਕਿਰਤੀ ਅਤੇ ਤੱਤ)

ਭਾਗ-ਅ

ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ: ਸੂਫ਼ੀ ਕਾਵਿ

ਭਾਗ-ਈ

ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ: ਕਿੱਸਾ ਕਾਵਿ

ਭਾਗ-ਸ

ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ: ਬੀਰ ਕਾਵਿ

ਪਾਠ ਅਤੇ ਹਵਾਲਾ ਪੁਸਤਕਾਂ

ਲੇਖਕ	ਸਾਲ	ਟੁਸਤਕ	ਪਬਲਿਸ਼ਰਜ਼
(ਸੰਪਾਦਕ) ਹਰਜਿੰਦਰ ਸਿੰਘ ਛਿੱਲੋਂ ਅਤੇ ਨਰਜੀਤ ਸਿੰਘ ਖਹਿਰਾ	2013	ਮੱਧਕਾਲੀਨ ਪੰਜਾਬੀ ਕਾਵਿ	ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ
ਡਾ. ਰਤਨ ਸਿੰਘ ਜੱਗੀ	2018	ਸਾਹਿਤ ਦੇ ਰੂਪ	ਪਬਲਿਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ

Course Code	GEO266
Course Title	Fundamentals of Remote Sensing and GIS
Type of Course	Minor Theory
L T P	4 0 0
Credits	4
Course Objectives (CO)	<ul style="list-style-type: none"> • To understand the historical development and fundamental principles of remote sensing, including electromagnetic radiation and its interaction with the atmosphere and earth's surface. • To explore the types and functioning of remote sensing sensors, scanning mechanisms, and different forms of resolution in satellite imagery. • To apply practical knowledge of remote sensing and GIS tools for data acquisition, representation, and analysis through software such as ArcGIS and QGIS using real-world datasets..
Course Outcomes	<p>CO1: The student will be able to understand the basic principles of remote sensing, including electromagnetic radiation (EMR) and its interaction with the atmosphere and surface features.</p> <p>CO2: To analyze the types and capabilities of various RS sensors and understand how resolution affects image interpretation and analysis</p> <p>CO3: To apply GIS concepts for handling spatial and attribute data using vector and raster models, and to perform data input, editing, and visualization.</p>

UNIT I

Introduction and History of remote sensing. Radiation Laws, basic concepts of Electromagnetic radiation (EMR). EMR interaction with atmosphere and surface features,

RS Sensors: Scanning mechanism, Resolution and its types.

UNIT II

Introduction to GIS: Overview, History and Concepts of GIS, Scope and Application Areas, Purpose and Benefits of GIS, Components and Functional Elements of GIS.

Data Input, Storage and Editing: Nature of Geographic Data: Spatial and Attribute Data, Concept of vector and raster-based models

UNIT III

Project -1 Remote sensing data acquisition: Aerial photograph, Satellite Imagery and other digital data products and Representation of the data using the ArcGIS, Qgis, or other related software.

UNIT IV

Project-2: Representation of Data: Population data and Agriculture data by Point symbols, Line symbols and area symbols using the shape file of Punjab or any other region of India.

Essential Readings:

1. Bhatta, Basudeb, 2020: *Remote Sensing and GIS*, 3rd Edition, Illustrated, Oxford University Press.
2. Joseph, George & Jeganathan, C., 2024: *Fundamentals of Remote Sensing*, 3rd Edition, Telangana Universities Press.

Further Readings:

1. Burrough, P.A., 1986: Principles of Geographical Information Systems in Land Resources Assessment, Clarendon Press, Oxford.
2. Burrough, P.A., and Mc Donnel, R.A., 1998: Principles of Geographical Information Systems, Oxford University Press.
3. Gautam, N.C., 1970: Urban Landuse Study through Aerial Photo- interpretation Techniques, Pink Publishing House, Mathura.
4. Star, J. and Ester, J., 1990: Geographic Information System, Prentice-Hall.
5. Maguire, D. J., Goodchild, M. and Rhind, D. J., 1990: Geographical Information Systems:
6. Principles and Applications, Longman Science and Technology Publications. Robinson
7. H., et al., 1995: Elements of Cartography, John Wiley.

Course Code	ECO264
Course Title	Fiscal Economics
Type of Course	Minor /Theory
LTP	4:0:0
Credits	4
Course Pre-requisite	NA
Course Objective	<p>1. To enable the students to understand the basics of public finance and international trade.</p> <p>2. Introduce students to the primary functions of government to generate resources from the people and to spend money improving their lives..</p>
Course Outcomes	<p>On completion of the course students would be able to:</p> <p>1. Evaluate the basics of public finance</p> <p>2. Analyse the primary functions of government to generate resources from the people and to spend money improving their lives.</p>

UNIT-I

Introduction to Public Finance: Nature, Scope and its Importance. Public Expenditure: Canons, Principle of Maximum Social Advantage, Wagner's Law, Causes for the Recent Growth of Public Expenditure in India. Taxation: Classification and Canons, Characteristics of a Good Tax System.

UNIT-II

Incidence and Impact of Taxation, Taxable Capacity: Absolute and Relative Capacity, Determinants of Taxable Capacity. Public Debt: Its types and Role, Burden of debt and Methods of its Redemption. Deficit Financing: Objectives and Limitations.

Unit III

Public budgets: kinds of budget, programme budgeting and zero-base budgeting; different concepts of budget deficits, budget of Union Government in India.

Unit IV

Fiscal federalism –Criteria for resource transfer from Union to States, Centre-State financial relations in India, recommendations of the latest Finance Commission.

Text Book And References

Author(S)	Title	Publisher
Musgrave, A.R. & Musgrave, P. B	Public Finance in Theory and Practice	McGraw Hills, International Students' Edition
Kindleberger, C. P	International Economics	Richard Irwin Homewood, Illinois, Indian Edition
Bhatia, H.	Public Finance	Vikas Publishing House Pvt. Ltd
Dalton, H	Principles of Public Finance	Routledge and Kegan Paul, Londo

Program Code: UG011

Introduction to Indian Music Vocal-II (PRACTICAL)

Course Code	MUC268
Course Title	Introduction to Indian Music Vocal-II (Practical)
Type of course	Practical
L T P	0:0:4
Credits	2
Course prerequisite	NA
Course Objectives (CO)	<ol style="list-style-type: none">1. The students will be able to understand the need, content and process and basic guidelines of music.2. The students will be able to develop right understanding for music.3. The students will be able to realize the significance of music.

List of Practical

1. Janpuri, asavari, desh
2. Talas: teental, rupak, talwara
3. One shabad
4. One folk song
5. One Gazal
6. One tarana of any ragas
7. Sing with tanpura
8. Knowledge of one vilamvatkiyal

Reference Books:

S. No.	Author(S)	Title	Publisher
1	Devinderkaur	Sangeet roop	AvamVadya Sangeet Kanishka Publishers, New Delhi
2	Shanti goverdhan	Sangeet darpan	Howdery Roshan Press