The institution envisions an education system rooted in Indian ethos making education more experiential, holistic, integrated, inquiry driven, discovery oriented, learner centred, flexible and enjoyable. The institution aims to create a system that is aligned with the aspirational goal of 21st century by laying emphasis not only on cognitive development but also building character and creating holistic and well-rounded individuals equipped with the key 21st century skills.

The curriculum and pedagogy of the institution lays stress on developing a deep sense of respect towards fundamental duties and constitutional values among the students. The institution aims to instill among the students a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect and deeds as well as to develop knowledge, skills, values and dispositions that support responsible commitment to human rights, sustainable development and living and global well-being, thereby, reflecting a truly global citizen.

Every programme has clearly defined programme learning outcomes and course learning outcomes. They have been articulated by taking inputs and suggestions from every stake holder.

- Programme learning outcomes and course learning outcomes are discussed in the classrooms. These are available on website as well as in information hand book.
- Programme learning outcomes and course learning outcomes are aligned with institute vision and mission statement.
- The institute is affiliated to GNDU, Amritsar. The curriculum is defined by it and is used to guide the process for defining Programme educational objectives.

M.ED. (2-YEARS)

PROGRAMME LEARNING OUTCOMES
On successful completion of the two-year M.Ed. programme, students will be able to develop-

1. Research skills: Understand different research methods, equipping students with relevant tools and techniques, data collection and analysis by using statistical measures, use of conceptual understanding in practical research work and writing a research report.

2. Self-study: Self-study component helps in self-directed learning as it gives opportunities to students to study in depth about a particular issue and gain knowledge.

3. Analytical and interpretative skills: Enhance the analytical and interpretation skills of data. Students are well trained in using statistical measures, software’s like: SPSS, MS-EXCEL etc.

4. Leadership and management skills: The course focuses on formulating and implementing leadership and management skills. The course will provide the students with a systematic framework for understanding the school management and its different strategies.

5. Entrepreneurial skills: Understand the concept of entrepreneurship and skill sets of an entrepreneur and develop skills for a business, exploration of different challenges of real-life situation.

6. Decision making skills: Enable them to solve various problems of school management and classroom management.

7. Use of technology: Understand the innovative technology and tools of ICT and their use in teaching learning environment. Use of ICT in research perspective, design and develop ICT integrated learning resources, analysis and interpretation of the research data with the help of ICT.

8. Relationship between school and society: Understand the social norms and educate the students accordingly.

9. Social resilience: Understand about social entities and enable to cope up with adverse conditions of life.

10. Effective citizen ethics: Understand different values, morality and social service and accept responsibility for the society.

12. Structuring the curricula: Understand the basis, principles and process of curriculum development at primary and secondary level.

COURSE LEARNING OUTCOMES FOR M.ED. (2-YEARS)

- Understand the dynamics of individual development.
- Explain the different approaches concerning the process of learning and knowledge construction.
- Describe the group dynamics and social behaviour.
- Familiarize with socio-emotional climate in the classroom.
- Understand the relationship between Philosophy and Education.
- Explain the modern concept of philosophy.
- Gain insight of the basic Indian and Western concepts of education.
- Analyse major modern educational philosophies and philosophers.
- Compare between different philosophies and their educational implications.
- Develop an appreciation for the role of philosophy in guiding the teaching learning process of education.
- Understand the dynamics of individual development.
- Explain the different approaches concerning the process of learning and knowledge construction.
- Describe the group dynamics and social behaviour.
- Familiarize with socio-emotional climate in the classroom.
- Identify a research problem.
- Review the literature for research purpose.
- Represent data graphically.
- Formulate research questions.
• Compute descriptive statistics.
• Understand the various institutions of secondary education
• Gain insight into the structure of secondary education
• Familiarize with the administrative system of secondary education
• Understand the functions of secondary education
• Gain insight into the status of secondary education
• Familiarize with the present problems of secondary education
• Critically appraise various aspects of secondary education
• Gain insight into the structure of curriculum and pedagogy
• Evolve concepts of pedagogical knowledge
• Familiarize with the assessments suggested by national reports
• Relate various models of curriculum assessment
• Describe the basics of communication
• Perform Expository writing
• Develop an ability to listen, converse, speak, present, explain and explicit their ideas
• Understand the importance of Society and Education in Self Development
• Reinforce the gender roles in Self Development
• Perform Yoga for their mental and physical well being
• Develop Self Concept
• Understand the nature of education as a social sub- system.
• Explain the concept of cultural change, multiculturalism and dimensions of multiculturalism.
• Describe educational institution as an agency of socialization
• Analyse education from different sociological perspectives and theoretical framework.
• Reflect upon educational problems and issues related to the weaker sections of the society.
• Describe an education system as embedded in social structure and culture.

SEMESTER–I
(COURSE–I) PHILOSOPHY OF EDUCATION

Through this course students will be able to

- Develop an appreciation for the role of philosophy in guiding the teaching learning process of education.
- Understand the relationship between Philosophy and Education.
- Explain the modern concept of philosophy
Gain insight of the basic Indian and Western concepts of education

Develop a critical understanding of major modern educational philosophies

Compare between different philosophies and their educational implications

(COURSE–II) PSYCHOLOGY OF LEARNING AND DEVELOPMENT

Through this course students will be able to

- Understand the dynamics of individual development.
- Explain the different approaches concerning the process of learning and knowledge construction.
- Describe the group dynamics and social behaviour.
- Familiarize them with socio-emotional climate in the classroom.

(COURSE–III) INTRODUCTION TO EDUCATIONAL RESEARCH METHODOLOGY

Through this course students will be able to

- Identify a research problem.
- Formulate research questions
- Review the literature for research purpose.
- Represent data graphically.
- Compute descriptive statistics

(COURSE–IV A (E) a) INSTITUTIONS, SYSTEMS AND STRUCTURES AT ELEMENTARY SCHOOL STAGE

Through this course students will be able to

- Understand the various institutions of education
- Gain insight into the structure of elementary education
- Familiarize with the administrative system of elementary education

(COURSE–IV A (E) b) ELEMENTARY STAGE – STATUS, ISSUES AND CONCERNS

Through this course students will be able to 
Understand the functions of elementary education.
Gain insight into the status of elementary education.
Familiarize with the present educational problems of elementary education.
Critically appraise various aspects of elementary education.

(COURSE–IV A (E) c) ELEMENTARY STAGE- CURRICULUM, PEDAGOGY AND ASSESSMENT

Through this course students will be able to

- Gain insight into the structure of curriculum and pedagogy
- Evolve concepts of pedagogical knowledge
- Familiarize with the assessments suggested with national reports
- Study various models of curriculum assessment

(COURSE–IV A (S) a) INSTITUTIONS, SYSTEMS AND STRUCTURES AT SECONDARY AND SENIOR SECONDARY SCHOOL STAGE

Through this course students will be able to

- Understand the various institutions of secondary education
- Gain insight into the structure of secondary education
- Familiarize with the administrative system of secondary education

(COURSE–IV A (S) b) SECONDARY AND SENIOR SECONDARY STAGE – STATUS, ISSUES AND CONCERNS

Through this course students will be able to

- Understand the functions of secondary education
- Gain insight into the status of secondary education
- Familiarize with the present problems of secondary education
- Critically appraise various aspects of secondary education

(COURSE–IV A (S) c) SECONDARY AND SENIOR SECONDARY STAGE- CURRICULUM, PEDAGOGY AND ASSESSMENT

Through this course students will be able to

- Gain insight into the structure of curriculum and pedagogy
- Evolve concepts of pedagogical knowledge
- Familiarize with the assessments suggested by national reports
- Study various models of curriculum assessment.

**PRACTICUM–I: COMMUNICATION AND EXPOSITORY WRITING**

Through this course students will be able to

- Enhance their ability to listen, converse, speak, present, explain and explicit their ideas
- Understand the basics of communication
- Be a good and effective speaker and listener
- To perform Expository writing

**PRACTICUM–II: SELF DEVELOPMENT**

Through this course students will be able to

- Develop Self Concept
- Understand the importance of Society and Education in Self Development
- Reinforce the gender roles in Self Development
- Perform Yoga for their mental and physical well being

**SEMESTER–II**

**(COURSE–I) SOCIOLOGY OF EDUCATION**

Through this course students will be able to

- Understand the nature of education as a social sub-system.
- Analyze education from different sociological perspectives and theoretical framework.
- Understand educational institution as an agency of socialization.
- Reflect upon educational problems and issues related to the weaker sections of the society.
- Know how education is embedded in social structure and culture.

**(COURSE–II) HISTORICAL–POLITICAL PERSPECTIVE OF EDUCATION**

Through this course students will be able to

- Gain insight into the ancient Indian education system.
Understand the general development and progress of education prior to independence and after independence.

Familiarize with the landmarks of education structure existing in India.

Reflect on changing political context of education and support system of education

(COURSE–III) EDUCATION STUDIES

Through this course students will be able to

- Understand interdisciplinary nature of education
- Identify various types of institutions in India
- Explain Contemporary concerns of policy practices
- Explore education system in India

(COURSE–IV) FUNDAMENTALS OF TEACHER EDUCATION

Through this course students will be able to

- Understand the objectives of NCF (2005) and NCFTE (2009).
- List the different modes of in-service teacher education
- Familiarize with different modes of pre service teacher education.
- Gain insight into the transactional approaches for foundational and developmental courses.
- Evaluate various components of a pre-service and in-service teacher education programs

(COURSE–V) STAGE SPECIFIC INTERNSHIP IN TEACHER EDUCATION INSTITUTION (SECONDARY AND SENIOR SECONDARY STAGE)

Through this course students will be able to

- Discover the real experiences of classroom teaching
- Prepare macro lesson plan
- Construct and use appropriate audio-visual teaching aids for effective teaching

(COURSE–VI) DISSERTATION (Formulation of Synopsis)
Through this course students will be able to

- Compare different research methods
- Equip with relevant tools and techniques
- Write a research report.

**SEMESTER—III**

*(COURSE—I) ADVANCED EDUCATIONAL RESEARCH METHODOLOGY*

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

- Understand the different research methodologies.
- Explain various issues and problems of educational research.
- Use different statistical techniques for analysis of data.

*(COURSE—II) TRENDS IN TEACHER EDUCATION*

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

- Understand and appreciate the research perspective on various practices in teacher education.
- Understanding of various avenues of teacher’s professional development
- Explain different policies of teacher education
- Describe structure and management of teacher education curriculum, infrastructure and resources needed, and the issues and problems related to teacher preparation
- Develop professional attitudes, values and interests needed to function as a teacher educator
- Summarize the issues, problems and concerns in teacher education

*(COURSE—III) CURRICULUM STUDIES*

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

- Understand the meaning of Curriculum.
- Outline various determinants of curricula
- Summarize the knowledge in designing curricula
- Develop the different skills related with different subjects

(COURSE-IV-B(S) Option: (i) Secondary and Senior Secondary Stage

Specialisation Optional Course- Curriculum Pedagogy and Assessment

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

- Understand types and approaches of curriculum development.
- Know various models and steps in curriculum development
- Develop a broad perspective on curriculum development

Option: (ii) Secondary and Senior Secondary Stage

Specialisation Optional Course- Educational Planning, Economics and Policy

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

- Describe political economy of education.
- Understand the relationship between education and economic development
- Explain the need, scope and purpose of educational planning

Option: (iii) Secondary and Senior Secondary Stage Specialisation Optional Course-Educational Management, Administration and Leadership

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

- Describe the basic concept of Educational administration, Management and Leadership.
- Understand the basic principal of administration and Management.
- Explain the skills and styles of Leadership.

Option: (iv) Secondary and Senior Secondary Stage Specialisation Optional Course- Inclusive Education

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

- Understand concept of inclusive education.
- Explain special education, integrated education and inclusive education practices.
- Conclude the recommendations of policies for inclusive education.

Option: (v) Secondary and Senior Secondary Stage Specialisation Optional Course-Educational Technology and ICT

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

- Understand the role of educational technology and modern innovations in teaching-learning process.
- Analyse the process of teaching and learning
- Use Information communication and technology in teaching learning process.

(COURSE–V) INTERNSHIP IN A SCHOOL WITH STAGE SPECIFIC SPECIALIZATION

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

- Recognize diverse learners in inclusive classroom setup.
- Discover the real experiences of classroom teaching.
Apply teaching skills and dealing with classroom problems.
Develop teaching learning resources relevant to the needs of the learner

(COURSE–VI) DISSERTATION (Data Collection)

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

- Understand different research methods
- Equip with relevant tools and techniques
- Write a research report.

SEMESTER–IV

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

SPECIALISATION – OPTIONAL COURSES

<table>
<thead>
<tr>
<th>Course-IV-B (E-i)</th>
<th>CURRICULUM PEDAGOGY AND ASSESSMENT (a) ADVANCED CURRICULUM THEORY</th>
</tr>
</thead>
</table>

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

- Reflect upon the concept of curriculum and curriculum theory.
- Describe the nature of human knowledge.
- Explain the model of curriculum planning.
- List and explain different curriculum patterns and designs.
- Gain insight into models of curriculum change and innovation.
- Explain diffusion theory and model of dissemination of curriculum change and innovation.

<table>
<thead>
<tr>
<th>Course-IV-B (E-i)</th>
<th>CURRICULUM PEDAGOGY AND ASSESSMENT (b) CURRICULUM TRANSACTION</th>
</tr>
</thead>
</table>

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

- Describe various methods/media for transaction.
- Discuss approaches of curriculum transaction.
- Explain role of ICT in curriculum Transaction.
- Develop skills to integrate Audio Visual Aids in curriculum
transaction.

Understand the role of communication in curriculum transaction

Course-IV-B (E-i) CURRICULUM PEDAGOGY AND ASSESSMENT (c) APPROACHES TO CURRICULUM ASSESSMENT

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

- Understand process of curriculum assessment
- Differentiate between formative and summative evaluation
- Gain insight into various strategies used for assessment
- Utilize different techniques for evaluation of curriculum and program
- Explain various tools used in curriculum assessment

Course -IV-B (E-ii) EDUCATIONAL PLANNING, ECONOMICS and POLICY (a) EDUCATIONAL PLANNING

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

- Identify the need, scope and importance of educational planning in terms of national and community needs.
- Understand the social and cultural bases of educational planning.
- Gain insight of the various guiding principles of educational planning.
- Explain the impact of five year plans on education

Course -IV-B (E-ii) EDUCATIONAL PLANNING, ECONOMICS and POLICY (b) EDUCATIONAL FINANCE AND ECONOMICS OF EDUCATION

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

- Explain the relationship between the financial support of education and quality of education.
- Familiarize with the various sources of financing education in India.
- Identify the direct and indirect objects of expenditure in education.
- Analyze the financial problems of educational administration.

Course -IV-B (E-ii) EDUCATIONAL PLANNING, ECONOMICS and POLICY (c) EDUCATION POLICY AND RESEARCH
After the completion of the course students will be able to:

- Explore various education policies and commissions
- Develop the skills in planning and using a variety of administrative strategies
- Analyze the documents through surveys.
- Evaluate the different policies.

### Course-IV-B (E-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (a) SCHOOL MANAGEMENT

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

- Understand the concept of classroom management.
- Familiarize with the concept of institutional planning for school development.
- Understand the management strategies for quality improvement.
- Familiarize with organizational structure.

### Course-IV-B (E-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (b) SCHOOL ADMINISTRATION

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

- Understand the concept and importance of school administration.
- Familiarize with new trends and problems in educational administration.
- Understand various educational bodies.
- Maintain and utilize various grants for quality improvement.

### Course-IV-B (E-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (c) EDUCATIONAL LEADERSHIP

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

- Critically examine the core and contemporary leadership theories relevant to educational practice and settings.
- Know about new changes and challenges in leadership of institutions.
- Develop capacities for being efficient and effective educational leaders.
Course-IV-B (E-iv) INCLUSIVE EDUCATION  (a) EDUCATION FOR SPECIAL CHILDREN

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

- Understand concept, and educational implications of visual impairment.
- Understand the concept, classification and educational provision for children with hearing impairment.
- Learn about the concept, identification and intervention strategies for children with autism and speech impairment.
- Familiarize them with the concept of mental retardation

Course-IV-B (E-iv) INCLUSIVE EDUCATION  (b) GENDER, SCHOOL AND SOCIETY

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

- Understand the present approach of education of children with special needs.
- Explore the possibility of change through inclusive education
- Develop a comprehensive and critical understanding on disability and marginalization.
- Understand inequality and diversity in Indian classroom.

Course-IV-B (E-iv) INCLUSIVE EDUCATION - (c) INCLUSIVE EDUCATION AND ITS PRACTICES

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

- Understand Inclusive School Education Concept and nature.
- Develop awareness of learner towards inclusive education and its practices.
- Enable the student to organize inclusive classroom.

Course-IV-B (E-iv) EDUCATIONAL TECHNOLOGY AND ICT  (a)ICT AND EDUCATIONAL TECHNOLOGY

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

- Use modern innovations in teaching-learning process.
Understand the role of multi-media in education.
Evaluate the use of various teaching aids in classroom.
Able to formulate objectives related to different domains.

Course-IV-B (E-iv) EDUCATIONAL TECHNOLOGY AND ICT (b) ICT IN EDUCATION

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

- To theoretical perspective of educational technology as a field of study.
- To have future practitioners a conceptual understanding related to systemic and institutional development.
- Certain competencies and skills related to instructional management and classroom practices.

Course-IV-B (E-iv) EDUCATIONAL TECHNOLOGY AND ICT (c) EDUCATIONAL MEDIA AND RESEARCH IN CLASSROOM

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

- To enable learners apply ICT tools in courseware design and conduction of research work
- To enable student with the pattern of e-content design and its validation
- To enable students evaluate on-line learning materials and process of online testing

Course-IV-B (S-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a) ADVANCED CURRICULUM THEORY

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

- Reflect upon the concept of curriculum and curriculum theory.
- Describe the nature of human knowledge.
- Explain the model of curriculum planning.
- List and explain different curriculum patterns and designs.
- Gain insight into models of curriculum change and innovation.
- Explain diffusion theory and model of dissemination of curriculum change and innovation

Course-IV-B (S-i) CURRICULUM PEDAGOGY AND ASSESSMENT (b) CURRICULUM TRANSACTION
After the completion of the course students will be able to:

- Describe various methods/media for transaction.
- Discuss approaches of curriculum transaction.
- Explain role of ICT in curriculum Transaction.
- Develop skills to integrate ICT in curriculum transaction.
- Understand the importance of collaborative learning.

<table>
<thead>
<tr>
<th>Course-IV-B (S-i)</th>
<th>CURRICULUM PEDAGOGY AND ASSESSMENT (c)</th>
<th>APPROACHES TO CURRICULUM ASSESSMENT</th>
</tr>
</thead>
</table>

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

- Understand process of curriculum assessment
- Differentiate between formative and summative evaluation
- Utilize different techniques for evaluation of curriculum and program
- Explain various tools used in curriculum assessment

Course-IV-B (S-II) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (a) EDUCATIONAL PLANNING AND ECONOMICS OF EDUCATION

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

- Explain the types and approaches to educational planning
- Understand the concept of education as consumption and investment
- Analyze the political economy of education.
- Understand the labour markets.

Course-IV-B (S-II) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (b) EDUCATIONAL PLANNING, MANAGEMENT AND FINANCING OF EDUCATION

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

- Develop an insight into the perspectives of management theories in the light of practices in education.
- Understand educational management system in India.
- Understand the relationship between the financial support of
education and quality of education.

- Explore the financial problems of educational administration.

**Course-IV-B (S-II) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (c) EDUCATIONAL POLICY AND RESEARCH**

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

- Explore various education policies and commissions
- Develop the skills in planning and using a variety of administrative strategies
- Analyze the documents through surveys.
- Evaluate the different policies.

**Course-IV-B (S-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (a) EDUCATIONAL ADMINISTRATION**

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

- Develop an insight of management process in educational organization.
- Analyze educational management at different levels.
- Understand educational planning, human resource development and staff development.

**Course-IV-B (S-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (b) EDUCATIONAL ADMINISTRATION**

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

- Explore trends in Educational Administration.
- Understand and appreciate the role of different agencies in educational administrations.
- Identify the problems of educational administration in India.
- Comprehend the significance of educational administration at different levels.

**Course-IV-B (S-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (c) LEADERSHIP IN EDUCATION**
After the completion of the course students will be able to:

- Utilize the leadership skills in maintaining human relations in administration.
- Understand the role of leader in the professional growth of the person.
- Understand the role of principal as a democratic leader.
- Explore the barriers to educational leadership.

Course-IV-B (E-iv) INCLUSIVE EDUCATION (a) INCLUSIVE EDUCATION FOR CHILDREN WITH DIVERSE NEEDS

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

- Understand the nature of difficulties encountered by children with diverse needs.
- Discuss the causes of various disabilities.
- Understand the needs of the children with diverse needs.
- Appreciate the role of teacher for educating children with diverse needs.

(b) PREPARATION AND MANAGEMENT OF INCLUSIVE EDUCATION

- Understand the essentials for the preparation for inclusive education.
- Comprehend the need of planning and management for inclusive education.
- Appreciate the role of the concerned personnel for supporting inclusion for children with diverse needs.
- Recognize the needs of preparation of teachers for inclusion.

c) TRENDS, ISSUES AND INNOVATIONS IN INCLUSIVE EDUCATION

- Understand the current trends in Inclusive Education.
- Understand the needs national issues in Inclusive education.
- Recognize the need for promoting supportive services for inclusion.
- Decide the need for promoting innovations in Inclusive Education.
AND EDUCATIONAL TECHNOLOGY

- Understand the role of mass-media in education.
- Evaluate the use of various teaching aids in classroom.
- Use modern innovations in teaching-learning process.

(b) EDUCATIONAL TECHNOLOGY AND RECENT DEVELOPMENT

- Explain theoretical perspective of educational technology as a field of study.
- Analyse situation as future practitioners related to systemic and institutional development.
- Develop certain competencies and skills related to instructional management and classroom practices.

(c) LATEST TRENDS IN EDUCATIONAL TECHNOLOGY

- Apply ICT tools in courseware design and conduction of research work
- Recognise the pattern of e-content design and its validation
- Evaluate on-line learning materials and process of online testing

COURSE–V ACADEMIC WRITING

- Understand writing and various styles of writing
- Perform good academic writing
- Distinguish a good academic writing from others
- Develop reports and thesis

COURSE–VI DISSERTATION

- Understand different research methods
- Equip with relevant tools and techniques
- Write a research report.

BED MED INTEGRATED (3-year programme)

PROGRAMME LEARNING OUTCOMES

- To understand children’s needs, motives, growth pattern and the process of learning to stimulate learning and creative thinking to foster growth and
• To develop an understanding of the close relationship between society and school, between life and school work.
• To help future prospective teacher to develop competence to teach subjects of their specialization, on the basis of an adequate theory of learning and a sound knowledge of the subject.
• To translate objectives of secondary education in terms of specific programmes and activities in relation to the curriculum.
• To provide guidance in educational, personal and vocational matters.
• To develop in the pupil’s capacity for thinking and working independently and guide the pupils to that end.
• To appreciate the dynamic nature of the class situation and teaching techniques.
• To understand how children learn and develop how they differ in their approaches to learning and create learning opportunities that are adapted to diverse learners and learning contexts.
• To plan learning experiences that are based on learner's existing proficiency, interests, experiences including misconceptions and errors and understand how students come to view, develop and make sense of subject matter contained in the learning experiences.
• To develop self-identity as a teacher educator through continuous experiences and reflective practices that continually evaluate the effects of his/her choices and actions.

PROGRAM SPECIFIC OUTCOMES

• The program prepares educators for middle and secondary school pedagogy (English language, Science, Mathematics and Social Sciences) and integrates additional coursework leading to specialization in teacher education, pedagogic and curriculum studies, ICT and New Media, policy and research.
• Enable learners to become curriculum developers, researchers and educational policy analysts.
• The programme integrates content and pedagogy to base pedagogic understanding and develops professional identity and capability of educators as subject experts, with knowledge of curriculum, pedagogy and
assessment and diverse uses of media and technology.

COURSE LEARNING OUTCOMES

SEMESTER I

COURSE I CONTEMPORARY INDIA AND EDUCATION

Through his course students will be able to

- Understand the concept of Diversity as it exists in Contemporary Indian society.
- Develop understanding of policy frameworks for public education
- Develop understanding of educational structure in contemporary India
- Understand constitutional provisions.
- Develop understanding of classroom in social context
- Understand the classroom ethos
- Gain Insight into Educational Opportunities
- Understand issues of contemporary Indian society
- Gain Insight into Universalization of Education

COURSE II UNDERSTANDING THE LEARNER

Through this course students will be able to

- Understand the theoretical perspective of learning and the process of transfer of learning
- Describe the stages of growth and development.
- Understand the nature of learner and understand the importance of individual differences in normal classroom.
- Know the Management of learning and classroom behaviour
• Appreciate the nature of Learning Diversity.
• Explain the different learning styles.

COURSE III LEARNING AND TEACHING

Through this course students will be able to

• Understand the concept of learning comprehend the theories of learning
• Understand various aspects of teaching
• Recognize the relationship between teaching and learning
• Analyze the complex process of teaching
• Acquaint themselves with different approaches of teaching that support learning
• Gain insight into various models of teaching
• Realize the significance of the context in which the teaching learning process occurs

COURSE IV LANGUAGE ACROSS THE CURRICULUM

Through this course students will be able to

• Understand the concept of classroom transaction
• Familiarize with various constitutional provisions and language policy
• Explain the nature and types of questioning
• Explain the Concept of Listening, Speaking, Reading and Writing and its significance
• Understand discussion and questioning as tools of learning.

COURSE V AND VI

Pedagogy of a School Subject – I (PS-I) and Pedagogy of a School Subject- II (PS-II)

• Develop understanding of the significance of that particular pedagogy subject in the present context.
• Correlate particular pedagogy subject with other school subjects.
• Develop an understanding of aims and objectives of teaching of school subject.
• Provide knowledge of different methods of teaching school subjects to student teachers.
• Acquaint student teachers with different techniques of evaluation.
• Prepare and use different teaching aids.

COURSE VII - EPC I DRAMA AND ART IN EDUCATION

Through this course students shall be able to

• Use drama processes to examine their present and to generate new knowledge
• Gain basic knowledge about colour scheme.
• Prepare effective teaching aids.
• Develop imagination and sense of appreciation of art and aesthetics sense.
• Understand the world and themselves in it.

COURSE VIII - EPC II DEVELOPING ICT SKILLS AND INTEGRATION

Through this course students will be able to

• Comprehend the electronic systems and apply them in education
• Understand the scope of ICT and its applications in teaching learning.
• Make the students familiar with new trends, techniques in education for achieving the goals
• Get acquainted with emerging trends in ICT of effective teaching and learning.
• Understand the integration of ICT with teaching learning process.

SEMESTER II

COURSE I ASSESSMENT FOR LEARNING

Through this course students will be able to

• Gain a critical understanding of issues in assessment and evaluation.
• Become cognizant of key concepts, such as formative and summative assessment, evaluation and measurement, test, examination
• Be exposed to different kinds and forms of assessment that aid student learning
• Become the use of a wide range of assessment tools, and learn to select and construct these appropriately
• Evolve realistic, comprehensive and dynamic assessment procedures that are able to keep the whole student in view
• Familiarize with interpreting scores and providing feedback

COURSE II INTRODUCTION TO RESEARCH METHODOLOGY

Through this course students will be able to

• Develop research tools and test
• Compute descriptive statistics
• Represent data graphically.
• Select appropriate Sampling Methods.
• Identify sampling techniques and Formulate hypothesis
• Review the literature for research purpose
• Understand the concept of the educational research.

COURSE III INTEGRATING ICT IN TEACHING LEARNING

Through this course students will be able to

• Describe the instructional design
• Explain the various approaches of instructional designing
• Understand the concept, need and importance of ICT and its application in education
• Understand ICT based teaching-learning strategies
• Create awareness about appropriate use of ICT resources.

COURSE IV FUNDAMENTALS OF TEACHER EDUCATION

Through this course students will be able to

• Understand the concept and scope of Teacher Education in India with the Historical perspectives
• Understand the Problems of Teacher Education in India.
• Explain the System and Structure of Teacher Education in India.
• Understand the Different Teacher Education Programmes and their Utility.

• Understand the Aims and Objectives of Teacher Education at Elementary and Secondary. Perspectives.

(COURSE V and VI)

Pedagogy of a School Subject – I (PS-I) and Pedagogy of a School Subject – II (PS-II)

Through this course students will be able to

• Familiarize student teachers to some important methodologies & techniques of teaching subject.

• Enable student teachers to prepare and use appropriate audio-visual teaching aids for effective teaching of school subject.

• Differentiate different types of approaches of pedagogy of a school subject.

• Understand the concept of evaluation.

• Understand different types of test.

• Know how to prepare macro lesson plan.

• Understand different types of micro teaching skills.

COURSE VII INCLUSIVE EDUCATION

Through this course students will be able to

• Understand the concept of inclusive education.

• Understand the need of promoting inclusive education.

• Develop healthy attitude towards inclusive education.

• Understand the children with diverse needs.

• Use pedagogical strategies for addressing diversity.

COURSE VIII (I) VOCATIONAL AND WORK EDUCATION

Through this course students will be able to

• Acquire the knowledge of nature, aims and objectives of vocational and work
• Understand the concept of vocational and work education.

• Understand the historical, philosophical and sociological basis of work and vocational education.

• Acquaint the students regarding SUPW.

COURSE VIII (II) HEALTH AND PHYSICAL EDUCATION

Through this course students will be able to

• Maintain and promote good health.

• Bring the overall awareness of sports values and to inculcate among students the desired habits and attitude towards physical education

• Develop the understanding of physical education and its related fields.

COURSE VIII (III) ENVIRONMENTAL EDUCATION

Through this course students will be able to

• Develop awareness about problems related to the human environment.

• Progress a perspective in which these problems can be framed and analysed in a scientific manner.

• The role of teacher and students regarding conservation and preservation of environment.

COURSE VIII (IV) PEACE AND VALUE EDUCATION

Through this course students will be able to

• Develop awareness of value education.

• Get an insight into the strategies of inculcation of values among children.

• Know the pedagogy and evaluation for peace education.

• Recognize the importance of peace education in national development.

• Comprehend the concept of peace education.

COURSE VIII (V) GUIDANCE AND COUNSELLING

Through this course students will be able to

• Enable the teacher trainees to organize guidance programs in secondary/senior secondary schools.
• Develop skills of collection of Data through testing and non-testing tools.
• Understand the meaning, aim, objectives and need of Guidance and Counselling.

COURSE IX EPC: III READING AND REFLECTING ON TEXTS

Through this course students will be able to

• Discuss narrative text, autobiographical text and ethnographical text.
• Reflect upon different types of policy document
• Able to explain different types of Text

SEMESTER–III

COURSE I SCHOOL MANAGEMENT

Through this course students will be able to

• Understand school as a platform for conducive learning environment.
• Understand the role of teacher and the principal in ensuring a vibrant school climate.
• Familiarize with the concept of Quality Enhancement and Management in school.

COURSE II CURRICULUM DEVELOPMENT

Through this course students shall be able to

• Understand the meaning of curriculum
• Identify the components of curriculum
• Describe the various principles of curriculum development
• Explain various determinants of curriculum
• Develop a broad perspective on curriculum development
• Study types and approaches of curriculum development.
• Study various models and steps in curriculum development

COURSE III I-3 SCHOOL INTERNSHIP (16 WEEKS)

Through this course students will be able to
• Integrate different teaching skills.
• Correlate different subjects with real life experiences.
• Know how to conduct action research.
• Know how to prepare achievement and diagnostic test.
• Screen an educational film/documentary followed by critical analysis.
• Organize various Co-Curricular activities such as morning assembly, debate, declamation etc.

**COURSE IV I-4 FIELD ENGAGEMENT WITH COMMUNITY**

Through this course students will be able to

• Sensitize themselves towards various societal concerns.
• Theoretically orient them to the concept of NaiTaleem propagated by Mahatma Gandhi including experiential learning & work education.

**SEMESTER–IV**

**COURSE I PHILOSOPHY OF EDUCATION**

Through this course students will be able to

• Explain the doctrines, different functions & branches of philosophy.
• Identify the significant features of Schools of Indian Philosophy.
• Discuss & enumerate the Ultimate & Proximate aims & goals of Education in Indian Philosophical Traditions for the present Indian Education System.
• Elucidate the contributions to educational thinking of great Indian Thinkers.
• Explain the concepts, fundamental thinking & also critically analyse the different Western Schools of philosophy.

**COURSE II PSYCHOLOGY OF LEARNING AND DEVELOPMENT**

Through this course students shall be able to

• Understand the concept of human development
• Explore the different approaches of individual development.
• Explain the different approaches concerning the process of learning.

**COURSE III TRENDS IN TEACHER EDUCATION**
Through this course students will be able to

- Understand the Concept, Development and Agencies of Teacher Education.
- Understand the Need for Teacher Education at Tertiary Level.
- Understand the Recommendations of Various Commissions for Teacher Education.
- Understand the Issues, Problems and Innovative Practices in Teacher Education.
- Research and Professionalism in Teacher Education.
- Understand various methods to managing Teacher Education.

COURSE IV ADVANCED EDUCATIONAL RESEARCH METHODOLOGY

Through this course students will be able to

- Understand the concept of Research and Educational Research.
- Explain the characteristics of quantitative, qualitative and mixed research.
- Select and explain the method appropriate for a research study.
- Understand basics of qualitative research and techniques of qualitative data analysis.
- Understand the role and use of statistics in educational research.
- Explain the importance of documentation and dissemination of researches in education.
- Represent the data graphically.

COURSE V A (E) a) ELEMENTARY STAGE- SYSTEMS, STRUCTURES, ISSUES AND CONCERNS

Through this course students shall be able to

- Understand the various institutions of education
- Gain insight into the structure of elementary education
- Familiarize with the administrative system of elementary education.

COURSE VI A (E) (c) ELEMENTARY STAGE- CURRICULUM, PEDAGOGY AND ASSESSMENT

Through this course students will be able to
• Gain insight into the structure of curriculum and pedagogy
• Evolve concepts of pedagogical knowledge
• Familiarize with the assessments suggested with national reports
• Study various models of curriculum assessment.

COURSE VI A (S) (a) SENIOR AND SENIOR SECONDARY STAGE-INSTITUTIONS, SYSTEMS AND STRUCTURES

Through this course students will be able to

• Understand the various institutions of secondary education
• Gain insight into the structure of secondary education
• Familiarize with the administrative system of secondary education

COURSE V A (S) (c) SECONDARY AND SENIOR SECONDARY STAGE-CURRICULUM, PEDAGOGY AND ASSESSMENT

Through this course students will be able to

• Gain insight into the structure of curriculum and pedagogy
• Evolve concepts of pedagogical knowledge
• Familiarize with the assessments suggested by national reports
• Study various models of curriculum assessment

COURSE 6 DISSERTATION (FORMULATION OF SYNOPSIS)

Through this course students will be able to

• Prepare synopsis on an educational problem.
• Understand different research methods
• Enable students to equip with relevant tools and techniques
• Enable to write a research report

SEMESTER V

COURSE I SOCIOLOGY OF EDUCATION

Through this course students will be able to
• Understand the Concept of Sociology.
• Understand the Concept of Social Stratification.
• Make a Critical Analysis of the Social Structure.
• Understand the Concepts and Processes of Social Institutions, Social Organizations and Social Stratification.
• Develop a Sociological Outlook towards education for becoming capable of directing the course of Development of Education.

COURSE II HISTORICAL, POLITICAL AND ECONOMIC PERSPECTIVES OF EDUCATION

Through this course students will be able to

• Understand the factors from historical perspective that contributed to present education system, explain the important features of various reports, commissions & policies of education during pre & post independence development of education in India
• Understand human capital, education & employment analysis of earning, manpower planning & financing of education
• Understand the pre-independence & post-independence development of education in India
• Familiarize the key concepts of economic and political developments in India.
• Investigate how globalisation influences educational reform.

COURSE III EDUCATION STUDIES

Through this course students will be able to

• Understand the nature of education as a discipline/an area of study
• Examine issues related to education as interdisciplinary knowledge
• Examine critically the theories and basic concepts of education drawn from various
• Disciplines cognate to education such as Philosophy, Psychology, Sociology, Management, Economics etc in such a way that their linkages
with methods, pedagogy and practices in the classroom could be established

- Examine critically the concerns arises from vision of school education and teacher education and also the vision of great educators
- Reflect on the multiple contexts in which the school and teacher education institutions are working
- Discuss the emerging dimensions of school and teacher education.

COURSE IV: B (E-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a)
CURRICULUM DEVELOPMENT

Through this course students will be able to

- Understand the principles of curriculum development
- Understand the need for and the components of curriculum development.
- Understand the process involved in curriculum planning
- Analyze the issues of different kinds involved in curriculum development

COURSE IV: B (S-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a)
CURRICULUM DEVELOPMENT

Through this course students will be able to

- Understand the need for and the components of curriculum development.
- Understand the process involved in curriculum planning
- Analyze the issues of different kinds involved in curriculum development.

COURSE IV: B (E-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a)
ADVANCED CURRICULUM THEORY

Through this course students will be able to
Reflect upon the concept of curriculum and curriculum theory.

Describe the nature of human knowledge.

Explain the model of curriculum planning.

List and explain different curriculum patterns and designs.

Gain insight into models of curriculum change and innovation.

Explain diffusion theory and model of dissemination of curriculum change and innovation.

COURSE IV: B (S-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a)
ADVANCED CURRICULUM THEORY

Through this course students will be able to

• Reflect upon the concept of curriculum and curriculum theory.
• List and explain different curriculum patterns and designs.
• Gain insight into models of curriculum change and innovation.
• Explain diffusion theory and model of dissemination of curriculum change and innovation.

COURSE IV: B (E-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (a) EDUCATIONAL PLANNING AND POLICY

Through this course students will be able to

• Reflect on various concerns of educational policy at elementary level
• Develop understanding about quality dimensions of elementary level
• Examine the existing reports to gain insight into concerns of elementary education.
• Reflect on various issues related with elementary education.
• Understand about the policies and programmes of elementary education
• Understand the concept of educational planning at elementary level
• Gain insight into financing of education at elementary level

COURSE IV: B (S-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY
(a) EDUCATIONAL PLANNING AND POLICY

Through this course students will be able to

• Explain concept, nature, principles and procedure of educational planning at secondary level
• Acquaint the students with the concept of educational planning of education at secondary level
• Explain types of educational policy, link between educational policy and national development policy.
• Understand the concept of educational planning at secondary level
• Gain insight into financing of education at secondary level

COURSE IV: B (E-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (a) ECONOMICS OF EDUCATION

Through this course students will be able to

• Understand the genesis of concept of economics of education.
• Describe and differentiate between expenditure and investment, social and economic returns and private funding in the concept of economics of education.
• Appreciate and explain impact of liberalization, privatization and globalization on financing of elementary education.
• Understand the policy issues in financing education at elementary level.
• Gain information about global perspectives in financing education at elementary level.

COURSE IV: B (S-II) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (A) INSTITUTIONS, STRUCTURE
AND ISSUES

Through this course students will be able to

- Understand the genesis of concept of economics of education.
- Describe and differentiate between expenditure and investment, social and economic returns and private funding in the concept of economics of education.
- Develop understanding of financing of secondary education in the light of vocationalisation of education and skill development programmes.
- Understand the policy issues in financing education at secondary level.
- Appreciate and explain impact of liberalization, privatization and globalization on financing of secondary education.

COURSE IV: B (E-III) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (A) INSTITUTIONS, STRUCTURE AND ISSUES

Through this course students will be able to

- Understand the status of Elementary Education
- Analyze organizational structure of Elementary Education and role of various organizations, institutions and agencies in Elementary Education
- Understand the functioning of various support services at Elementary Level
- Develop critical understanding about issues and challenges in elementary education
- Understand the significance of EMIS and Research in bringing positive changes in elementary education

COURSE IV: B (S-iii) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (A) INSTITUTIONS, STRUCTURE AND ISSUES

Through this course students will be able to
• Understand the concept and objectives of Secondary and Senior Secondary education
• Understand the status of Secondary and Senior Secondary education in India
• Analyze the issues of secondary and Senior Secondary education in different aspects
• Develop critical understanding about current status of Secondary education in India
• Understand policy perspectives in decentralization of administration and management of secondary and senior secondary education
• Analyze the role of various organizations, institutions and agencies in Secondary education

COURSE IV: B (E-iii) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (A) SCHOOL MANAGEMENT
Through this course students will be able to

• Understand the concept of management of elementary education
• Think about planning, policy and execution strategy of primary level
• Understand about school organization and Education Management
• Understand about innovative contribution of school education management and planning
• Understand about organization, policy, research and innovation at school level
• Understand about the structure of the Universal Elementary Education (UEE)

COURSE IV: B (S-iii)) EDUCATIONAL MANAGEMENT, ADMINISTRATION AND LEADERSHIP (A) SCHOOL MANAGEMENT
Through this course students will be able to

• Understand the importance of educational planning and school management.
• Think about planning, policy and execution strategy of secondary level
• Understand about organization, policy, research and innovation at school level
• Understand the ways of resolving problems in classroom management.
• Analyze different learning resources for effective classroom management.

COURSE IV: II: B (E-iv) INCLUSIVE EDUCATION (A) INCLUSIVE EDUCATION AND ITS PRACTICES
Through this course students will be able to

• Describe the concept of Inclusion and its historical perspective.
• Differentiate various types of Inclusion
• Understand new innovative techniques in inclusive education
• Explain the concept of Disability.
• Explain various constrains in setting Inclusive Schools.

COURSE IV: B (S-iv) INCLUSIVE EDUCATION (A) INCLUSIVE EDUCATION AND ITS PRACTICES
Through this course students will be able to

• Describe the concept of Inclusion and its historical perspective.
• Differentiate various types of Inclusion
• Understand new innovative techniques in inclusive education
• Explain the concept of Disability.
• Explain various constrains in setting Inclusive Schools.

COURSE IV: B (E-iv) INCLUSIVE EDUCATION (A) TRENDS AND ISSUES IN INCLUSIVE EDUCATION
Through this course students will be able to

• Understand Inclusive School Education Concept and nature.
• Develop awareness of learner towards inclusive education and its practices.
• Enable the student to organize inclusive classroom.

COURSE IV: B (S-iv) INCLUSIVE EDUCATION (A) TRENDS AND ISSUES IN INCLUSIVE EDUCATION
Through this course students will be able to

• Understand Inclusive School Education Concept and nature.
• Develop awareness of learner towards inclusive education and its practices.
• Enable the student to organize inclusive classroom.

COURSE IV: B (E-v) EDUCATIONAL TECHNOLOGY AND ICT (A) EDUCATIONAL TECHNOLOGY
Through this course students will be able to

• Understand the nature and scope of educational technology.
• Understand the various forms and approaches of educational
technology.

- Gain insight into the educational technology programmes in India.
- Become effective user of technology in Education
COURSE IV: B (S-v) EDUCATIONAL TECHNOLOGY AND ICT (A)

EDUCATIONAL TECHNOLOGY

Through this course students will be able to

- Understand the nature and scope of educational technology.
- Understand the various forms and approaches of educational technology.
- Gain insight into the educational technology programmes in India.
- Become effective user of technology in Education.

COURSE IV: B (E-v) EDUCATIONAL TECHNOLOGY AND ICT (b)

EDUCATIONAL TECHNOLOGY

Through this course students will be able to

- Understand the concept and need of ICT in education.
- Know about the barriers in integrating ICT in classrooms.
- Develop understanding of the ICT supported teaching learning strategies.
- Understand the concept of communication process.
- Understand different modern techniques of communication.
- Appreciate the role of ICT in education.
SEMESTER VI

COURSE I :- CURRICULUM STUDIES

Through this course students will be able to

- Understand the meaning of curriculum development
- Explain various models and approaches of curriculum development
- Describe the concept of curriculum evaluation
- Understand various issues in curriculum development
- Understand the role of teacher in the transaction and evaluation of curriculum.
- Understand the recent developments in the field of curriculum development.
- Understand the planning and evaluation of curriculum.

COURSE–II: B (E-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a)

CURRICULUM TRANSACTION

Through this course students will be able to

- Describe various methods/media for transaction.
- Discuss approaches of curriculum transaction.
- Explain role of ICT in curriculum Transaction.
- Develop skills to integrate Audio Visual Aids in curriculum transaction.
- Understand the role of communication in curriculum transaction

COURSE–II: B (S-i) CURRICULUM PEDAGOGY AND ASSESSMENT (a)

CURRICULUM TRANSACTION

Through this course students will be able to

- Describe various methods/media for transaction.
- Discuss approaches of curriculum transaction.
- Explain role of ICT in curriculum Transaction.
- Develop skills to integrate ICT in curriculum transaction.
- Understand the importance of collaborative learning.

**COURSE–II: B (E-i) CURRICULUM PEDAGOGY AND ASSESSMENT (b)**

**CURRICULUM EVALUATION**

Through this course students will be able to

- Understand process of curriculum assessment
- Differentiate between formative and summative evaluation
- Gain insight into various strategies used for assessment
- Utilize different techniques for evaluation of curriculum and program
- Explain various tools used in curriculum assessment

**COURSE–II: B (S-i) CURRICULUM PEDAGOGY AND ASSESSMENT (b)**

**CURRICULUM EVALUATION**

Through this course students will be able to

- Understand process of curriculum assessment
- Differentiate between formative and summative evaluation
- Gain insight into various strategies used for assessment
- Utilize different techniques for evaluation of curriculum and program
- Explain various tools used in curriculum assessment.

**COURSE–II: B (E-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (a)**

**EDUCATIONAL PLANNING, MANAGEMENT AND FINANCING OF EDUCATION**

Through this course students will be able to

- Understand indigenous system of elementary education make a critical review policies and programmes related to elementary education
- Understand monetary, planning and management of elementary education at national, state& local level
- Read and understand global reports on elementary education and review state policies in the light of global trends.

**COURSE–II: B (S-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (a)**
FINANCING OF EDUCATION

Through this course students will be able to

• Acquaint the students with the need, scope and purpose of educational planning in terms of national and community needs
• Understand the recommendations of different education commissions regarding secondary education commissions
• Know different programmes and policies for realizing the constitutional obligations related to secondary education in India
• Develop an idea about the structure of secondary education in India.

COURSE–II: B (E-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (b) EDUCATIONAL POLICY AND RESEARCH

Through this course students will be able to

• Understand the theoretical aspects of educational policy and planning. Understand contextual framework for policy making in education in India.
• Acquaint with the technologies and methods about educational planning w.r.t. Five Year Plans and focus on socially and economically disadvantage groups.
• Understand the dynamic of pattern and utilization of financing of education at different stages of education.
• Critically appraise the educational development and its impact on national development in the light of the principle of social and gender equity.

COURSE–II: B (S-ii) EDUCATIONAL PLANNING, ECONOMICS AND POLICY (b) EDUCATIONAL POLICY AND RESEARCH

Through this course students will be able to

• Understand the theoretical aspects of educational policy and planning. Understand contextual framework for policy making in education in India.
• Acquaint with the technologies and methods about educational planning w.r.t. Five Year Plans and focus on socially and economically disadvantage groups.
• Understand the dynamic of pattern and utilization of financing of
education at different stages of education.

- Critically appraise the educational development and its impact on national development in the light of the principle of social and gender equity.

COURSE–II: B (E-iii) Educational Management, Administration and Leadership (a) EDUCATIONAL ADMINISTRATION

Through this course students will be able to

- Understand meaning, concept and scope of educational administration and planning in secular, socialist and democratic system of India.
- Develop understanding of educational planning in Five Year Plans in independent India in the context of globalized economy.
- Develop understanding of SSA and other initiatives in achieving the goal of UEE.
- Appreciate and describe role of community, PRI and other organizations for UEE.

PAPER–II: B (S-iii) Educational Management, Administration and Leadership (a) EDUCATIONAL ADMINISTRATION

Through this course students will be able to

- Understand meaning, concept and scope of educational administration and planning in secular, socialist and democratic system of India.
- Understand the emerging role of community in educational administration in the light of 73rd and 74th amendment and NPE (1986).
- Develop understanding of RMSA and other state level initiative in universalization of school education.
- Acquaint with the funding of secondary education for vocalization and skill development in current period.
- Understand role of monitoring bodies in implementation of government schemes for universal school education.

COURSE–II: B (E-iii) Educational Management, Administration and Leadership (b) EDUCATIONAL LEADERSHIP
Through this course students will be able to

- Critically examine the core and contemporary leadership theories relevant to educational practice and settings.
- Know about new changes and challenges in leadership of institutions.
- Develop capacities for being efficient and effective educational leaders.

COURSE–II: B (S-iii) Educational Management, Administration and Leadership (b)

EDUCATIONAL LEADERSHIP

Through this course students will be able to

- Utilize the leadership skills in maintaining human relations in administration.
- Understand the role of leader in the professional growth of the person.
- Understand the role of principle as a democratic leader.
- Explore the barriers to educational leadership.

COURSE–II: B (E-iv) INCLUSIVE EDUCATION Course Title (a)

PREPARATION AND MANAGEMENT OF INCLUSIVE EDUCATION

Through this course students will be able to

- Understand the essentials for the preparation for inclusive education.
- Appreciate the role of the concerned personnel for supporting inclusion for children with diverse needs.
- Recognize the needs of preparation of teachers for inclusion.
- Understand the need of planning and management for inclusive education.

COURSE–II: B (S-iv) INCLUSIVE EDUCATION (a) PREPARATION AND MANAGEMENT OF INCLUSIVE EDUCATION

Through this course students will be able to

- Understand the essentials for the preparation for inclusive education.
- Appreciate the role of the concerned personnel for supporting inclusion for children with diverse needs.
• Recognize the needs of preparation of teachers for inclusion.
• Understand the need of planning and management for inclusive education.

COURSE–II: B (E-iv) INCLUSIVE EDUCATION (b) EDUCATION FOR SPECIAL CHILDREN

Through this course students will be able to

• Understand concept, and educational implications of visual impairment.
• Understand the concept, classification and educational provision for children with hearing impairment.
• Learn about the concept, identification and intervention strategies for children with autism and speech impairment.
• Understand the concept of mental retardation.

COURSE–II: B (S-iv) INCLUSIVE EDUCATION (b) EDUCATION FOR SPECIAL CHILDREN

Through this course students will be able to

• Understand concept, and educational implications of visual impairment.
• Understand the concept, classification and educational provision for children with hearing impairment.
• Learn about the concept, identification and intervention strategies for children with autism and speech impairment.
• Understand the concept of mental retardation.

COURSE–II: B (E-v) EDUCATIONAL TECHNOLOGY AND ICT (a) ICT IN TEACHING LEARNING

Through this course students will be able to

• Understand the usage of ICT in teaching learning process.
• Understand the concept of e-learning.
• Understand the application of ICT in classrooms.
• Get information about the role of ICT in assessment and management
teaching learning process.

- Explain different models of teaching

COURSE–II: B (S-v) EDUCATIONAL TECHNOLOGY AND ICT (a) ICT IN TEACHING LEARNING

Through this course students will be able to

- Understand the usage of ICT in teaching learning process.
- Understand the concept of e-learning.
- Understand the application of ICT in classrooms.
- Get information about the role of ICT in assessment and management in teaching learning process.
- Explain different models of teaching.

COURSE–II: B (E-v) EDUCATIONAL TECHNOLOGY AND ICT (b) EDUCATIONAL MEDIA AND RESEARCH IN CLASSROOM

Through this course students will be able to

- To enable learners apply ICT tools in courseware design and conduction of research work
- To enable student with the pattern of e-content design and its validation
- To enable students evaluate on-line learning materials and process of online testing
- Understand various new innovations in Educational technology

COURSE–II: B (S-v) EDUCATIONAL TECHNOLOGY AND ICT (b) EDUCATIONAL MEDIA AND RESEARCH IN CLASSROOM

Through this course students will be able to

- To enable learners apply ICT tools in courseware design and conduction of research work
- To enable student with the pattern of e-content design and its validation
- To enable students evaluate on-line learning materials and process of online testing
- Understand various new innovations in Educational technology

B.ED. (2-YEARS)
PROGRAMME LEARNING OUTCOMES

On successful completion of the two-year B.Ed. programme, students will be able to develop-

1. Teaching competency: Know, select and use of learner-centred teaching methods, understanding of paradigm shift in conceptualizing disciplinary knowledge in school curriculum, necessary competencies for organizing learning experiences, select and use of appropriate assessment strategies for facilitating learning.

2. Pedagogical skills: Applying teaching skills and dealing with classroom problems.

3. Teaching Through Nonconventional Modes: Evolving a system of education which enhances the potential of every learners to acquire, retain and transform knowledge leading to wisdom society through creative, experiential and joyful modes of learning.

4. Critical Thinking: Analysis of Curriculum, construction of blue print, selecting appropriate teaching strategies according to needs of students and conducting action research to solve classroom problems.

5. Effective Communication: Presenting seminar before peer students and teachers and practicing communication skills through various linguistic activities and applying it for better classroom communication.


7. Content Analysis: Analyse the text-books and syllabus.

8. Effective Citizen Ethics: Understand different values, morality, social service and accept responsibility for the society.

9. Social Resilience: Understand about social entities and enable to cope up with adverse conditions of life.


11. Team Work: Locate as a member or leader in diverse teams and in multi-
disciplinary settings by following the principles of collaborative learning, cooperative learning and team teaching.

PROGRAMME SPECIFIC OUTCOMES
1. To understand learner and his learning environment, contemporary India and education, school management, gender, school and society.

2. To comprehend Language across the curriculum, Reading and reflecting on Texts, Drama and Art in Education, developing Communication Skills and observation of school activities by school internship.

3. To understand the individual differences among students, measuring the attainment, evaluating progress, and assessing learning abilities, guidance and counselling programmes, educational technology, ICT and lesson planning.

4. To provide real experiences of classroom teaching and online teaching by using ICT and its different tools and software.

5. To understand the classroom diversities and enable them to deal with diverse learners in inclusive classroom setup, environmental education, Field Engagements with community and CP (NSS, Community Services etc.).

COURSE LEARNING OUTCOMES FOR B.ED. (2-YEARS)

SEMESTER–I

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

(COURSE–I) UNDERSTANDING THE LEARNER AND LEARNING ENVIRONMENT

- Describe the stages of growth and development
- Understand characteristics of adolescents with reference to socio-cultural factors
- Understand the role of teacher in holistic perspective of learner and learning
- Analyse the concept of inequality, marginalization and multiculturalism and their effect on learning
- Distinguish the different learning approaches and their educational implications
- Summarize the importance of individual differences in normal classroom

(COURSE–II) CONTEMPORARY INDIA AND EDUCATION
- Differentiate among Diversity, Inequality and Marginalization.
- Understand LPG (Liberalization, Privatization and Globalization) and its Impact on Society.
- Know historical background of Secondary Education
- Understand the constitutional obligations in relation to education.
- Understand the dynamism in concepts of education in relation to changing socio, political and economic conditions in India.
- Familiarize with the present educational problems of Secondary Education.
- Critically appraise various aspects of Secondary Education.

**(COURSE–III) EDUCATION AND DEVELOPMENT**

- Analyse the social, cultural and political context of education.
- Examine the changing emphasis on education in the context of globalization and internationalization.
- Understand the relevance of education in relation to social, political, economic and cultural context.
- Prepare the students to understand education helps in economic and national development.

**(COURSE: IV and V) Pedagogy of a School Subject – I (PS-I) and Pedagogy of a School Subject – II (PS-II)**

- Classify different methods of teaching school subjects to student teachers.
- Develop understanding of the significance of that particular pedagogy subject in the present context.
- Correlate particular pedagogy subject with other school subjects.
- Outline aims and objectives of teaching of school subject.
- Acquaint student teachers with different techniques of evaluation.
- Prepare and use different teaching aids.

**(COURSE: VI) LANGUAGE ACROSS THE CURRICULAM(CP-III)**

- Understand the concept of classroom transaction
- Recognize schema theories
- Explain the nature and types of questioning
• Explain the Concept of Listening, Speaking, Reading and Writing and its significance

(COURSE: VII) READING AND REFLECTING ON TEXTS (EPC-I)

• Discuss narrative text, autobiographical text and ethnographical text.
• Explain different types of Text
• Reflect upon different types of policy document

SEMESTER–II

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

(COURSE: I) UNDERSTANDING THE LEARNING PROCESS

• Know the various theories of learning
• Understand the concept of motivation and understand the role of teacher in motivating, strengthening and sustaining learning styles.
• Explain the nature and characteristics of teaching
• Describe the principles and maxims of teaching
• Discuss anatomy of teaching
• Differentiate between teaching and learning

(COURSE: II) ASSESSMENT FOR LEARNING

• Gain a critical understanding of issues in assessment and evaluation.
• Select cognizant of key concepts, such as formative and summative assessment, evaluation and measurement, test, examination
  • Be exposed to different kinds and forms of assessment that aid student learning
  • Become the use of a wide range of assessment tools, and learn to select and construct these appropriately
  • Evolve realistic, comprehensive and dynamic assessment procedures that are able to keep the whole student in view

(COURSE: III) Educational Technology and ICT

• Understand the nature and scope of educational technology and also
about the various forms of technology

- Explain the systems approach to Education and communication theories and modes of communication
- Familiar with the instructional design and modes of development of self learning material
- Describe the concept of ICT in education and appreciate the scope of ICT for improving the personal productivity and professional competencies

(COURSE: IV and V) Pedagogy of a School Subject – I (PS-I) and Pedagogy of a School Subject – II (PS-II)

- Describe some important methodologies & techniques of teaching subject.
- Prepare and use appropriate audio-visual teaching aids for effective teaching of school subject.
- Differentiate different types of approaches of pedagogy of a school subject.
- Know the concept of evaluation.
- Understand different types of test.
- Formulate macro lesson plan.
- Comprehend different types of micro teaching skills.

(COURSE: VI) DRAMA AND ART IN EDUCATION (EPC-II)

- Prepare effective teaching aids.
- Apply basic knowledge about colour scheme.
- Use drama processes to examine their present and to generate new knowledge, understanding and perceptions of the world and themselves in it.
- Develop some theatre skills that will later help them be creative and enlightened teachers.
- Develop imagination and sense of appreciation of art and aesthetic sense.

(COURSE: VII) COMMUNICATION SKILLS

- Construct a classroom climate that fosters learning, equity, and excellence and will use this knowledge to create a physical and emotional environment
that is safe and productive.

- Understand and apply principles and strategies for communicating effectively in varied teaching and learning contexts.
- Apply appropriate instruction that actively engages students in the learning process.
- Use of technology to plan, organize, deliver, and evaluate instruction for all students.
- Analyse student performance and achievement; provide students with timely, high-quality feedback; and respond flexibly to promote learning for all students.

**SEMESTER–III**

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

(COURSE–I) School Internship CPI (SI)&CPII(SI)

- Be exposed to the real experiences of classroom teaching.
- Set up diverse learners in inclusive classroom setup.
- Apply teaching skills and dealing with classroom problems.

(COURSE–II) FILED ENGAGEMENT WITH COMMUNITY and CP FE-III

- Develop an awareness and sensitivity.
- Progress the capacity to facilitate personal growth and social skills in their own students.
- Identify the diversities and dealing it in inclusive classroom environment for disabled students.

**SEMESTER–IV**

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

(COURSE–I) GENDER, SCHOOL and SOCIETY

- Understand the basic terms, concepts used in gender studies.
- Comprehend the gender discrimination in construction and dissemination of knowledge.
- Develop an awareness and sensitivity.

(COURSE–II) GUIDANCE AND COUNSELLING
• Understand the meaning, nature and scope of guidance.
• Recognize the role of guidance and counselling.
• Appreciate the need of guidance.
• Understand the meaning, nature and scope of counselling.
• Analyse the relationship between guidance and counselling.

(COURSE–III) INCLUSIVE EDUCATION

• Explain the concept of Disability.
• Describe the concept of Inclusion and its historical perspective.
• Differentiate various types of Inclusion.
• Explain various constraints in setting Inclusive Schools.

(COURSE–IV) SCHOOL MANAGEMENT

• Explain School as a conducive learning environment.
• Describe the role of teacher and the principal in ensuring a vibrant school climate.
• Summarize the concept of Quality Enhancement and Management in school.

(COURSE–V) VOCATIONAL AND WORK EDUCATION CP -V (Option: i)

• Describe education demands of the population, support professional, career development.
• Relate feed economy with qualified staff competitive both on local and international labour market.
• Support student mobility.
• Plan professional development of minority groups and create employment opportunities for them.
• Arrange competitiveness of employed be re-training and professional development

HEALTH AND PHYSICAL EDUCATION CP- V (Option: ii)

• State personal hygiene.
• Describe about the concept of health education.
• Explain the importance of balanced diet.
• Understand the techniques used to diagnose health.

PEACE AND VALUE EDUCATION CP- V (Option: iii)
• Describe the concept of peace education.
• Explain the dynamics of transformation of violence into peace.
• Generalize the significance of peace in Self-development.
• Familiarize the nature of conflicts and their resolutions.
• Use the knowledge, attitudes and skills needed to achieve and sustain a Global culture of peace.
• Appraise peace education in the curriculum.

FOUNDATIONS OF CURRICULAM DEVELOPMENT CP- V(Option: iv)

• Understand the concept of curriculum
• Differentiate curriculum and syllabus
• Discuss various Facets of curriculum
• Converse theories and types of curriculum
• Explain the process of curriculum development
• Discuss the role of school philosophy in developing curriculum
• Discriminate between centralized and de-centralized curriculum
• Confer the problem of curriculum load

(COURSE–VI) Enriching Learning through ICT (EPC–III)

• Describe about computer and its components.
• Prepare slide presentation.

(COURSE–VII) UNDERSTANDING THE SELF (EPC–IV)

• Discover and develop open-mindedness, the attitude of a self-motivated learner, having self-knowledge and self-restraint.
• Develop the capacity for sensitivity, sound communication skills and ways to establish peace and harmony.
• Progress the capacity to facilitate personal growth and social skills in their own students.

BA BED INTEGRATED (4 YEAR DEGREE PROGRAM)
PROGRAMME LEARNING OUTCOMES
On completion of this course, the students will be able to:

- Analyze the secondary school curriculum of various schools affiliated to different Boards.
- Make use of subject specific pedagogical knowledge and skills
- Practice skills and approaches for enhancing understanding of subject matter knowledge to be taught in secondary schools.
- Appreciate the role of teacher in prevailing socio-cultural and political systems in general and education system in particular.
- To initiate the discourse on education by organizing seminars, debates, lectures and discussion groups for student-teachers.
- To organize inter institutional activities for student-teachers on themes of educational significance and also make them participate in such events. A participatory teaching approach is adopted to help student-teachers develop reflective thinking and questioning skills.
- To provide strong professional base through diverse educational experiences.

PROGRAM SPECIFIC OUTCOMES

- Amelioration of Problem-Solving Skills: The programme prepares students to contextualize and to rationalize the principles of scientific enquiry, theoretical and philosophical thoughts, analytical and creative thinking for solving problems and making decision in the socio-pragmatic realities of life. These problem-solving skills are instrumental in finding, analysing, evaluating and applying information systematically so that judicious decision could be made.
- Appropriate Application of Methodological Tools: The programme makes a
candid attempt of familiarizing students with some relevant methodological tools which help them exploring the underlying ideas, thoughts, concepts and meanings in the available discourses of law, humanities, social sciences, art and aesthetics etc. A text is embedded into a rich cultural, social, pragmatic, and political realities and the apposite application of those methodological tools may unravel the textual and contextual richness.

- Developing Communicative Competence: The programme intends to develop grammatical and communicative competence among students and make them aware of the nature, form and function of language. Language is not merely a medium to communicate but is more fundamental to the process of the formation of ideas, thoughts and concepts. The programme therefore nurtures listening, writing, speaking and reading skills of students which allow them to communicate effectively in textual, personal and interpersonal contexts so that the discursive practices may be enriched and the trajectory of knowledge may get strengthened.

- Environment and Sustainability: The unprecedented growth and development in the world on industry, technology, trade and commerce etc have damaged the balance between nature and culture, Environment, ecology and all-natural resources have been exploited to such a level that many of them are exhausted. Looking at these miserable conditions, the programme intends to prepare students to respond to some major issues of environment and sustainability.

SEMESTER–I

Course 1 (YOGA EDUCATION)

Through this course students will be able to

- Know the historical and philosophical background of Yoga.
- Solve health related issues with the help of Pranayama’s
- Use meditation for reducing day to day stress
- Correlate Yoga with Education

Course 2 (ENGLISH)

Through this course students will be able to

- Speculate and acquire the basic knowledge of English literature, grammar, and composition.
• Analyse the difference between prose and poetry.
• Trace and learn the skill of writing in English.

Course 3 (PUNJABI)

Course 3 (PUNJABI)

Course 4 (Stream 1 – English Elective)

Through this course students will be able to

• Trace and learn the skill of writing in English.
• Deduce literal comprehension of the texts.

Course 4 (Stream 1 – Punjabi Elective)
Course 4 (Stream 1 – Hindi Elective)

Through this course students will be able to

- Develop literary skills
- Know about Adhunik hindi kaviyon ke kavya ka gyaan karana, unke sahityik parichya aur sahitya gat visheshataaon ka gyaan karana.

Course 4 (Stream 1 – PHILOSOPHY)

Through this course students will be able to

- Interpret the concept of philosophy
- Appraise the contribution of various Indian thinkers to the field of education
- Includes the formation and text of the thoughts of great Indian political thinkers like M.K. Gandhi, Swami Vivekananda and Shri Guru Nanak Dev Ji.

Course 4 (Stream 1 – PSYCHOLOGY)

Through this course students will be able to

- Identify learning opportunities for learners by understanding perspectives of development
- Develop skills to assess and enhance intelligence and personality of learners.
- Understand the role of teacher in holistic perspective of learner and learning

Course 4 (Stream 1 – PSYCHOLOGY - PRACTICAL)

Through this course students will be able to

- Assess and analyse intelligence of learners.
- Measure and analyse Verbal and serial learning.

Course 4 (STREAM–1 SOCIOLOGY)

Through this course students will be able to

- Understand the relationship between education and society.
- Acquaint students with contemporary philosophy.
• Analyse the role of family and society in modernisation.

Course 5 & 6 STREAM–2
MATHEMATICS
PAPER–I: ALGEBRA
Through this course students will be able to
○ Understand foundation knowledge of algebraic concepts.
○ Learn to analyze mathematical situations, formulate equations, and solve them systematically.
○ Understand the geometric interpretation of linear transformations and apply algebraic techniques to solve real-world problems

PAPER–II: CALCULUS AND TRIGONOMETRY

Through this course students will be able to

• Understand basic concepts of limits, continuity, and differentiability.
• Apply differentiation techniques to algebraic, trigonometric, and exponential functions.
• Explore circular and hyperbolic functions.
• Learn De-Moivre’s theorem and its applications.
• Understand inverse trigonometric functions.

Course 5 & 6 STREAM–2 COMPUTER SCIENCE

Through this course students will be able to

• Understand the concept of Computer Science.
• Understand the definition of a computer and its components
• Explore the generations of computers and their impact on technology.
• Correlate Computer science with other school subject
• Equip them with knowledge to set up and maintain a Computer laboratory.
• Acquire knowledge on latest trends in Information Technology.
• Differentiate different types of computer devices.

COURSE 5 & 6 STREAM–2 COMPUTER SCIENCE (PRACTICAL)

Through this course students should be able to

• Develop presentation slides to interact with outside learning community.
• Construct excel sheets and use them in evaluation.
COURSE 5 & 6 STREAM–2 ECONOMICS

Through this course students will be able to

• Understand about the various fundamental Concepts of Economic and statistics (Meaning, nature, scope and significance of fundamental Concepts).
• Distinguish between micro and macro Economics, Static and dynamic Analysis and stock and flow variables.
• Understand about the importance of National Income in Economic Welfare.

COURSE 5 & 6 STREAM–3 HISTORY

Through this course students will be able to

● Explore key aspects of ancient Indian history, culture, and archaeology.
● Understand civilizations, art, and societal structures.
● Focus on social, religious, and economic aspects during the Rig Vedic and Later Vedic periods.
● Analyze texts, rituals, and societal structures.
● Explore the transition to later historical periods, including Indo-Aryan settlements in Punjab.

COURSE 5 & 6 STREAM–3 GEOGRAPHY

Through this course students will be able to

• Understand the fundamental concepts of physical geography, including landforms, climate, and natural processes.
• Explore topics such as weather and climate, biogeography, geomorphology, and hydrology.
• Analyze the impact of physical factors on human activities and ecosystems.
• Study the relationship between humans and their environment.

COURSE 5 & 6 STREAM–3 GEOGRAPHY (CARTOGRAPHY)
Through this course students will be able to

- Acquaint themselves with laboratory exercises, particularly to show directions and bearings and different methods of representing relief.
- Understand the history of cartography and its evolution.
- Explore different types of maps, including topographic, thematic, and political maps.

**COURSE 5 & 6 STREAM–3 POLITICAL SCIENCE**

Through this course students will be able to

- Understand the nature and scope of Political Science.
- Understand the Historical Context of the Indian Constitution
- Evaluate the Working of Democratic Institutions
- Engage with Political Theory

**COURSE 5 & 6 STREAM–3 ECONOMICS**

Through this course students will be able to

- Understand about the various fundamental Concepts of Economic and statistics (Meaning, nature, scope and significance of fundamental Concepts).
- Distinguish between micro and macro Economics, Static and dynamic Analysis and stock and flow variables.
- Understand about the importance of National Income in Economic Welfare.

**COURSE 5 & 6 STREAM–4 PHILOSOPHY**

Through this course students will be able to

- Interpret the concept of philosophy
- Appraise the contribution of various Indian thinkers to the field of education
- Includes the formation and text of the thoughts of great Indian political thinkers like M.K. Gandhi, Swami Vivekananda and Shri Guru Nanak Dev Ji.

**COURSE 5 & 6 STREAM–4 PSYCHOLOGY**

Through this course students will be able to
• Identify learning opportunities for learners by understanding perspectives of development
• Develop skills to assess and enhance intelligence and personality of learners.
• Understand the role of teacher in holistic perspective of learner and learning.

Course 5 & 6 Stream 4—(PSYCHOLOGY - PRACTICAL)

Through this course students will be able to
• Assess and analyse intelligence of learners.
• Measure and analyse Verbal and serial learning.

Course 5 &6 (STREAM–4 SOCIOLOGY)

Through this course students will be able to
• Understand the relationship between education and society.
• Define fundamental terms such as society, community, social institution, and association.
• Interpret social phenomena using these foundational concepts.
• Recognize that social processes involve multiple factors and interactions.
• Analyse the role of family and society in modernisation.

Course EPC LIFE SKILLS EDUCATION

Through this course students will be able to
• Understand the concept and need of life skills in life.
• Correlate life skills with Success in life.
• Develop the skill of creative thinking, decision making and problem-solving ability.
• Manage stress using various Stress coping strategies.

SEMESTER–II

Course I ENVIRONMENTAL EDUCATION

Through this course students will be able to
• Reflect upon the concept and need of environmental education.
• Define major eco-systems and their conservation.
• Understand the role of different agencies in the protection of environment.
• Develop desirable attitude, values and respect for protection of environment.

Course 2 ENGLISH

Through this course students will be able to

• identify and understand the latest trends in poetry, prose and plays.
• develop skills to evolve ideas into expressions
• apply the learnt skills in constructive writing

Course 3 (PUNJABI)

ਪੇਪਰ-੩: ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਵੇਲਮ ਮਿਹਤਰ ਦੇ ਤਰੀਕੇ

• ਖੀਤ ਵੇਲਮ ਹਿੰਦਿਆਂਵਿਦਿਆਂ ਤੱਕ ਖੂਣ ਦੀਆਂ ਸਨੂੰ ਸਰਨ ਨੇਟਰਾ ਹੈ, ਪੰਜਾਬੀ ਬਣਾ ਦਾ ਹਿਸਾਅ ਖੂਣ ਤੱਕ ਪੰਜਾਬੀ ਮਿਹਤਰ ਦਾ ਅਪਨੇ ਵੱਲੋਂ ਬਣੇ ਅਕਾਦਮੀ ਮੇਕ ਮੰਤਰ ਵੱਲਾ ਹੈ।
• ਖ਼ਿਸਮ ਵੇਲਮ ਦਾ ਮਿਹਤਰ ਹਿੰਦਿਆਂਵਿਦਿਆਂ ਤੱਕ ਹੇਤਾਨੀ, ਹੇਤਾਨੀ ਵਗਰਾਣਾ ਅਤੇ ਖੀਤ ਮੰਤਰ ਦੇ ਵੱਢ ਦਿੱਖ ਮਿਹਤਰ ਚੀਨ ਖੂਣ-ਖੂਣ ਹਿੰਦ ਤੱਕ ਕਚਰ ਦੇ ਪੇਸਾ ਘੱਟਣਾ ਹੈ।
• ਹਿੰਦਿਆਂਵਿਦਿਆਂ ਖੂਣ-ਖੂਣ ਹਿਸ਼ੇਮੀ ਦੇ ਅਧਾਰ ਦਿੱਖ ਅਤੇ ਦਿੱਖ ਪੂਰਾਤ ਵਾਲ ਮੰਤਰ ਵਹਾਲ।
• ਕੁਝ ਮੰਤਰ ਦੇ ਵੇਲਮ ਹਿੰਦਿਆਂਵਿਦਿਆਂ ਅਧਾਰ ਉੱਤੇ ਮਿਹਤਰ ਸਰਨ ਅਤੇ ਮਿਹਤਰ ਹੂੰ ਮਿਹਤਰ ਦੇ ਪੇਸਾ ਵਹਾਲ ਹੋਣ ਦਾ ਮੰਤਰ ਖੂਣ ਦੇ ਖ਼ਿਸਮ ਖੂਣ ਬਣੋਵਾਅਮਦ ਮੇਕ ਤੱਕ ਪੜੂੰ ਅਤੇ ਖ਼ਿਸਮ ਦਾ ਅਕਾਦਮੀ ਫੇਸ਼ ਖੱਤਰ ਹੈ।
• ਖ਼ਿਸਮ ਦੀ ਖੂਣ ਅਧਾਰ ਅਤੇ ਵਗਰਾਣਾ ਕੇਂਦਰ ਦੀ ਕੰਮਾਣ ਅਤੇ ਖ਼ਿਸਮ ਮੰਤਰ ਤੱਕ ਵੱਲੋਂ ਬਣੇ ਅਕਾਦਮੀ ਮੰਤਰ ਦੇ ਪੇਸਾ ਵਹਾਲ ਹੋਣ ਦਾ ਮੰਤਰ ਖੂਣ ਅਤੇ ਮੰਤਰ ਦੇ ਪੇਸਾ ਵਹਾਲ ਹੋਣ।
• ਖ਼ਿਸਮ ਕਲਸ਼ ਦੀ ਖ਼ਿਸਮ ਅਧਾਰ ਅਤੇ ਕੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਅਤੇ ਕੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਦੇ ਮੰਤਰ ਤੱਕ ਖੂਣ ਹੋਣ ਦਾ ਮੰਤਰ ਖੂਣ ਅਤੇ ਮੰਤਰ ਦੇ ਪੇਸਾ ਵਹਾਲ ਹੋਣ।
• ਖ਼ਿਸਮ ਮੰਤਰ ਦੇ ਪੰਜਾਬੀ ਵਿੱਚ ਵੇਲਮ ਹਿੰਦ ਭਾਸ਼ਾ ਅਤੇ ਕੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਅਤੇ ਕੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਦੇ ਮੰਤਰ ਤੱਕ ਖੂਣ ਹੋਣ ਦਾ ਮੰਤਰ ਖੂਣ ਅਤੇ ਮੰਤਰ ਦੇ ਪੇਸਾ ਵਹਾਲ ਹੋਣ।
• ਖ਼ਿਸਮ ਵੇਲਮ ਕਲਸ਼ ਦੀ ਖ਼ਿਸਮ ਤੱਕ ਖੂਣ ਵਾਲੇ ਚੁੱਕੀ ਹੈ ਪੰਜਾਬੀ ਵਿੱਚ ਖ਼ਿਸਮ ਅਧਾਰ ਅਤੇ ਕੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਅਤੇ ਕੀ ਭਾਸ਼ਾ ਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਦੇ ਪੰਜਾਬੀ ਉੱਤੇ ਪੰਜਾਬੀ ਸਮਾਜ ਅਧਾਰ ਤੱਕ ਖੂਣ ਵਹਾਲ ਹੋਣ।
• ਜੀਵਿਤ ਦੀ ਭਰਤੀ।
• ਚਕਰਨਾਂ ਦੇ ਦਿੱਖਸਥ ਮੰਤਰ।
Course 4 (Stream 1 – English Elective)

Through this course students will be able to

- Trace and learn the skill of writing in English.
- Deduce literal comprehension of the texts.

Course 4 (Stream 1 – Punjabi Elective)

Course 4 (Stream 1 – Hindi Elective)

Through this course students will be able to
• Develop literary skills
• Know about Adhunik hindi kaviyon ke kavya ka gyaan karana, unke sahityik parichya aur sahitya gat visheshataaon ka gyaan karana.

Course 4 (Stream 1 – PHILOSOPHY)

Through this course students will be able to
• Know the relation of Ethics with Religion and Science.
• Critically analyse about Utilitarianism, Bhagavad Gita, Guru Granth Sahib etc.
• Incorporate the principles of Jainism and Buddhism in their lives.

Course 4 (Stream 1 – PSYCHOLOGY)

Through this course students will be able to
• Know about Concept and Nature of Motivation and various types of Motivation.
• Explain about personality of an individual and various theories relating to it.
• Define the various types of intelligence including emotional intelligence.

Course 4 (Stream 1 – PSYCHOLOGY PRACTICAL)

Through this course students will be able to
• Know about effect of Knowledge of Results on Performance.
• Determine AL and DL.
• Perform various types of personality tests.

Course 4 (STREAM–1 SOCIOLOGY)

Through this course students will be able to
• Know about social structure and social stratification.
• Explain the meaning of cultural lag.
• Discuss about Social Control and its significance in human life.

Course 5 & 6 STREAM–2 MATHEMATICS

PAPER–I: CALCULUS AND DIFFERENTIAL EQUATIONS
PAPER–II: CALCULUS
Through this course students will be able to

- Understand the fundamental concepts of differential calculus.
- Apply differentiation techniques to functions.
- Solve first-order ODEs using various methods (separation of variables, integrating factors, etc.).
- Develop a comprehensive understanding of matrices and linear algebra.

Course 5 & 6 STREAM–2 COMPUTER SCIENCE

Through this course students will be able to

- Implement jumping, branching, and looping constructs.
- Compare entry-controlled and exit-controlled loops.
- Learn about the C programming language and its applications.
- Recognize the advantages of using C for software development.
- Understand tokens (keywords, identifiers, operators, etc.).
- Identify and handle types of errors in C programs

COURSE 5 & 6 STREAM–2 COMPUTER SCIENCE (PRACTICAL)

Through this course students will be able to

- Know each and every thing about practical usage of programming in C language.

COURSE 5 & 6 STREAM–2 ECONOMICS

Through this course students will be able to
• Differentiate between Microeconomics (individual behavior) and Macroeconomics (aggregate economy).

• Analyze the determination of income and employment using both Classical and Keynesian models.

• Explore the implications of Say’s Law, aggregate demand, and aggregate supply.

• Explore the effects of static and dynamic multipliers on economic growth.

• Analyze the concept of Marginal Efficiency of Capital.

COURSE 5 & 6 STREAM–3 HISTORY

Through this course students will be able to

• Know the various conquests like The Conquests of the Ghaznavid in India.

• Discuss about Advent of the Mughals and various battles fought by them.

• Explain about The Mughal Government, Administration and Culture.

• Understand how the establishment of Maratha Power occurred in India.

COURSE 5 & 6 STREAM–3 GEOGRAPHY

Through this course students will be able to

• Acquaint the students with the elements and attributes of climatology and oceanography

• Define climatology as the study of long-term atmospheric conditions.

• Differentiate between climate (long-term patterns) and weather (short-term variations).

• Explore the elements that contribute to climate.

• Explore the impact of insolation (solar radiation) on temperature distribution.

• Discuss Köppen’s classification of climates and climatic types.

COURSE 5 & 6 STREAM–3 GEOGRAPHY (CARTOGRAPHY II )

Through this course students will be able to
Know about laboratory exercises particularly to show directions and bearings and different methods of representing relief. Knowledge of directions and bearings is essential and an introduction to weather maps is also required.

COURSE 5 & 6 STREAM–3 POLITICAL SCIENCE

Through this course students will be able to

- Define political system and recognize its significance.
- Explore the characteristics of different political systems (parliamentary democracy, absolute dictatorship, enlightened monarchy).
- Understand the functions of political systems in governing a state.

- Define rights and duties in the context of citizenship.
- Explore the relationship between individual rights and societal duties.
COURSE 5 & 6 STREAM–3 ECONOMICS

Through this course students will be able to

- Develop and understanding about important principles of micro economic.
- Understand Classical and Keynesian models of Economics
- Know the how prices and output of good/services and factor of production are determined.
- Understand about the type of market and their equilibriums.

COURSE 4 STREAM–4 PHILOSOPHY

Through this course students will be able to

- Know the relation of Ethics with Religion and Science.
- Know about Utilitarianism, Bhagavad Gita, Guru Granth Sahib etc.

COURSE 4 STREAM–4 PSYCHOLOGY

Through this course students will be able to

- Define psychophysics as the study of the relationship between physical stimuli and the sensations and perceptions they produce.
- Explore the concept of absolute threshold and differential threshold.
- Understand how methods like limits, constant stimuli, and average error are used to determine thresholds.
- Define variability and recognize its importance in statistical analysis.
- Explore measures like range, variance, quartile deviation, and average deviation.

COURSE 4 STREAM–4 PSYCHOLOGY PRACTICAL

Through this course students will be able to

- Investigate the famous Müller-Lyer illusion, where two lines with arrowheads appear to be different lengths due to visual cues.
- Use the method of average error to measure participants’ perception of line
lengths.

- Explore the method of limits or constant stimuli to determine the absolute threshold (minimum detectable stimulus) and difference threshold (smallest noticeable change) for sensory experiences.

**COURSE 4 STREAM–4 SOCIOLOGY**

Through this course students will be able to

- Know about social structure and social stratification.
- Explain the meaning of cultural lag.
- Understand about Social Control and its significance in human life.

**COURSE EPC UNDERSTANDING THE SELF**

Through this course students will be able to

- Discover and develop open-mindedness, the attitude of a self-motivated learner, having self-knowledge and self-restraint
Develop the capacity for sensitivity, sound communication skills and ways to establish peace and harmony.

- Develop the capacity to facilitate personal growth and social skills in their own students.

COURSE 7 DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION

Through this course students will be able to

- Know the nature and extent of Drug Abuse in India and Punjab.
- Recognize the various consequences of Drug Abuse.
- Know the methodologies to Prevent Drug abuse.
- Identify how school and teacher can sensitize the students in creation of awareness of consequences of drug abuse.
- Understand how media can act effectively to stop the usage of drugs by putting Restraint on advertisements of drugs, advertisements on bad effects of drugs.

SEMESTER III

COURSE 1 UNDERSTANDING EDUCATION AND ITS PERSPECTIVES

Through this course students will be able to

- Develop an insight into the fundamentals of Education.
- Understand the interdisciplinary nature of Education.
- Reflect upon the educational thoughts of Indian and Western thinkers.
- Critically examine the issues and concerns of education in the socio-cultural contexts of India.
- Understand the role of different agencies in promoting socialization.
- Correlate School with Societal needs.

COURSE 2 GENDER, SCHOOL AND SOCIETY

Through this course students will be able to

- Develop an insight into the different gender issues and concerns in the
society.

- Understand various Constitutional provisions related to gender.
- Identify various efforts taken by different agencies to tackle gender issues in India.
- Perform his/her role for minimizing gender inequalities in the society.

COURSE 3 ENGLISH

Through this course students will be able to

- Analyse the knowledge of grammar and vocabulary
- Consider and comprehend the unseen passages and learn the art of various types of writing
- Develop skills to evolve ideas into expressions
- Apply the learnt skills in constructive writing

COURSE 4 PUNJABI

Through this course students will be able to

- Provide an introduction for language skills and enhance literary skills too.
- Analyse the Punjabi literature related plays and biography of eminent writers

Course 5,6,7(Stream 1 – English Elective)

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

1. **Comprehensive Understanding of Animal Farm**
   - Students will demonstrate a comprehensive understanding of George Orwell's "Animal Farm," analysing its themes, characters, plot, and symbolism.
   - They will critically engage with the text to explore themes of power, corruption, revolution, and totalitarianism, drawing connections to historical and contemporary socio-political contexts.

2. **Appreciation and Analysis of Poetry**
They will analyse poetic devices, imagery, themes, and linguistic nuances employed by the poets to convey emotions, ideas, and experiences.

Through close reading and interpretation, students will develop an appreciation for diverse poetic forms and styles, enhancing their literary sensitivity and critical thinking skills.

3. Exploration of Prose Texts-
- Students will explore the prose texts "New Directions" Part 1, 2, and Part 3, examining themes, narrative techniques, and literary devices employed by the authors.
- They will analyse character development, plot structure, and thematic concerns to deepen their understanding of the human condition, cultural dynamics, and societal issues portrayed in the prose narratives.

4. Vocabulary Enhancement and Transcription Skills-
- Students will enhance their vocabulary and transcription skills by practicing the transcription of words such as agony, antonym, capable, committee, decorum, aeroplane, calendar, etc.
- They will develop proficiency in phonetics, spelling, and word pronunciation, enabling effective communication and language fluency in both spoken and written contexts.

By accomplishing these Course Learning Outcomes, students will not only acquire a profound understanding of literary texts but also develop critical thinking, analytical, and language skills essential for academic and professional growth in the field of English language and literature.

Course 5, 6, 7 (Stream 1 – Punjabi Elective) Through this course students will be able to

- Provide an introduction for language skills and enhance literary skillstoo.
- Analyse the Punjabi literature related plays and biography of eminent writers

Course 5, 6, 7 (Stream 1 – Hindi Elective)

Through this course students will be able to

- Develop literary skills
- Know about Adhunik hindi kaviyon ke kavya ka gyaan karana, unke sahityik parichya aur sahitya gat visheshataaon ka gyaan karana.
Course5,6,7 STREAM–1 PHILOSOPHY DEDUCTIVE LOGIC AND APPLIED ETHICS

Through this course students will be able to
- Know the Nature and Utility of Western Logic.
- Recognize about Medical Ethics, Educational Ethics, Legal Ethics Business Ethics

Course5,6,7 STREAM–1 PSYCHOLOGY

Through this course students will be able to
- Know about types of Variables like Stimulus, Organismic and Response Variables.
- Identify about Concept and Nature of Attention.
- Comprehend about concepts of Perception of Space and Movement

Course5,6,7 STREAM–1 PSYCHOLOGY PRACTICAL

Through this course students will be able to
- Investigate how learning a new skill positively or negatively affects the performance of a related skill.
- Use the style of learning and thinking (SOLAT) test to assess hemispheric dominance (left or right brain).
- Compare reaction times (e.g., finger vs. foot) using simple tasks.
- Explore how different body parts respond to stimuli.

Course5,6,7 STREAM–1 SOCIOLOGY

Through this course students will be able to
- Know about the Changing patterns in society and differences that exist between class and society
- Distinguish in detail about Society in Rural, Urban and Tribal India.
- Differentiate in types of families and marriages

Course5,6,7 STREAM–2 MATHEMATICS
Paper 1: - Analysis

- Understand the concepts of sequences, series, and limits, and apply them to various problems.
- Learn the criteria and tests for convergence and divergence of sequences and series, and evaluate them using different methods.
- Comprehend the notion of riemann integrability, and determine whether a function is integrable or not.
- Master the techniques of improper integrals, and use them to calculate beta and gamma functions

Paper 2: - ANALYTICAL GEOMETRY

Through this course students will be able to

- Recognize about Parabola, Ellipse and hyperbola along with their properties.
- Understand about Transformation of axes, Rotation of axes in two dimension and three dimensions
- Apply the concepts of transformation of axes, shifting of origin, and rotation of axes in two and three dimensions to solve problems involving coordinate geometry.
- Explore the features of sphere, such as sections, intersections, tangents, power, and radical planes, and use them to describe and manipulate spherical objects and surfaces.

Course 5,6,7 STREAM–2 COMPUTER SCIENCE

COMPUTER ORIENTED NUMERICAL AND STATISTICAL METHODS

Through this course students will be able to

- Know about various Numerical methods versus numerical analysis, Non-linear Equations, Iterative Solutions, Multiple roots etc.
- Understand the concepts and applications of numerical methods and numerical analysis in solving various problems.
- Learn the iterative methods for finding the roots of non-linear equations and the
interpolation methods for estimating the values of functions.

- Acquire the skills of solving simultaneous linear equations using matrix methods and matrix inversion techniques.
- Apply the numerical integration and differentiation methods for approximating the integrals and derivatives of functions.

Course5,6,7 STREAM–2 COMPUTER SCIENCE (Practical)

Through this course students will be able to

- Apply numerical methods to solve various mathematical problems using computer programs.
- Implement statistical techniques to analyze and interpret data using computer software.
- Use appropriate algorithms to perform numerical and statistical computations efficiently and accurately.
- Evaluate the results of numerical and statistical methods and compare them with theoretical or analytical solutions.

Course5,6,7STREAM–2 ECONOMICS

Through this course students will be able to
• Understand the nature and structure of the Indian economy and its various sectors.
• Analyze the performance and problems of agricultural and industrial development in India.
• Examine the direction and composition of India’s foreign trade and balance of payments.
• Evaluate the impact of population growth, inflation, unemployment, poverty and inequality on the Indian economy.
• Learn about the objectives, strategy and evaluation of planning in India and the role of Niti Ayog.

Course 5, 6, 7 STREAM – 3 HISTORY

Through this course students will be able to
• Understand the historical processes that led to the establishment of British rule in India and its impact on the society, economy, culture and politics of the country.
• Analyze the causes, nature and consequences of the uprising of 1857 and its significance in the Indian freedom struggle.
• Examine the various socio-religious movements that emerged in the 19th and early 20th centuries and their role in reforming and modernizing the Indian society.
• Trace the evolution of the Indian national congress and the emergence of Gandhi as the leader of the national movement.
• Evaluate the different phases and strategies of the national movement, such as the non-cooperation movement, the civil disobedience movement and the Quit India movement, and their impact on the British colonial rule.
• Appreciate the role of various sections and regions of the Indian society in the freedom struggle and the challenges faced by the newly independent nation.

Course 5, 6, 7 STREAM – 3 GEOGRAPHY

Through this course students will be able to
• Understand concept of resources and their interface with environment
• Examine use and misuse of various resources, and analyse future prospects
• Study various methods and approaches of conservation and management of natural resources
• Recognize the quantitative and qualitative aspects of human resources in spatial perspectives and the associated environmental problems.

Course 5, 6, 7 STREAM – 3 CARTOGRAPHIC REPRESENTATION OF GEOGRAPHIC DATA (PRACTICAL)

Through this course students will be able to

• Apprise the students with symbolization of different types of geographical data and depiction of various spatial data.
• Provide training in application of various graphical methods of depicting geographic data.

Course 5, 6, 7 STREAM – 3 POLITICAL SCIENCE

Through this course students will be able to

• Understand the historical development and basic features of the Indian constitution,
• Appreciate the significance of the preamble and the nature of Indian federalism.
• Analyze the fundamental rights, duties and directive principles of the state policy,
• Examine the composition, powers and role of the parliament, president, prime minister, cabinet, supreme court and high court at the union level.
• Evaluate the composition, powers and role of the governor, state legislature, chief minister and council of ministers at the state level.

Course 5, 6, 7 STREAM – 3 ECONOMICS

Through this course students will be able to

• Understand the nature and structure of the Indian economy and its various sectors.
• Analyze the performance and problems of agricultural and industrial development in India.
• Examine the direction and composition of India’s foreign trade and balance of payments.
• Evaluate the role and impact of foreign capital and multinational corporations in India.
• Assess the features and challenges of population growth, inflation, unemployment, poverty and inequality in India.
• Appreciate the objectives, strategy and evaluation of planning in India and the role and functions of Niti Ayog
Course 5,6,7 STREAM–4 PHILOSOPHY

Through this course students will be able to

- Understand the nature and Utility of Western Logic
- Know about Medical Ethics, Educational Ethics, Legal Ethics and Business Ethics.
- Be well verse with teleological Approach and De-ontological Approach to Moral Action

Course 5,6,7 STREAM–4 PSYCHOLOGY EXPERIMENTAL PSYCHOLOGY-I

Through this course students will be able to

- Study about cause and effect relationship.
- Know about the concept and Nature of Types of Variables like Stimulus, Organismic and Response Variables.
- Understand about various Theories of Colour Vision

Course 5,6,7 STREAM–4 PSYCHOLOGY PRACTICAL

Through this course students will be able to

- Discuss and demonstrate the utility of various psychological tests
- Relate and restate theoretical concepts to a real-world problem in a written report in terms of a statistical model or algorithm.

Course 5,6,7 STREAM–4 SOCIOLOGY

Through this course students will be able to

- Describe the concepts and features of family, kinship and marriage in India.
- Understand demographic profile of Indian society.
- Explain Familial and Social issues.

SEMESTER IV

COURSE 1 LANGUAGE PROFICIENCY AND COMMUNICATION SKILLS

Through this course students will be able to

- Understand the concept and process of communication.
- Enhance his/her skills of listening, speaking, reading and writing.
- Develop the required communication skills necessary for classroom
interaction.

- Develop a thorough understanding of linguistics and paralinguistics skills.

**COURSE 2 ENGLISH**

Through this course students will be able to

- Understand the art of reading and comprehending stories and prose
- develop the skill of advanced grammar and composition
- inculcate humane values and ethics through the given poem
- engage in the praxis of applying those theoretical and philosophical underpinnings for the analysis of a particular poem
- learn grammar as a rule governed behaviour

**COURSE 3 PUNJABI**

क्रोस डिजिटल डिजिटल

पत्रिका रंग महत्त्व रंग डिजिटल, लिस्टिङली लेख रेटो:।

1. मरविट रेंड-रंड तुरंत तो महत्त्व अंडे हिंदुं हिचरल अंडल रंगमिट हे।
2. लष्टक हिचरलों धलुडलू मुखां अंडे हिलेमधुंचा रंग हिचराळ वर्तव हे।
3. हिंदुं-ठुडू हिचरनार्नार हिचरलों तो महत्त्व अंडे हिचराळ वर्तव हे।
4. पंसाही क्रम रे हिचर, हिचर अंडे हिलेमधुंचा रंग हूँदाळ वर्तव हे।
5. हिंदुय, हिलर्नार्नार अंडे लष्टक रे तुर्य हिंदुं अथलीं धलकां रंग धुळाळच्या वर्तव हे।
6. पंसाही हरे महत्त्वली रे मूळ तुरंत तो महत्त्व हे।

**COURSE 4 & 5 STREAM 1 – ENGLISH (ELECTIVE)**

- Understand and apply the concepts and rules of English grammar as per the prescribed textbook "English Grammar in Use (Fourth Edition)" by Raymond Murphy, CUP, focusing on the revision of Units 26-37, 42-48, 92-97, and 113-120.
- Analyze and interpret poems from the anthology "Moments in Time," focusing on poems listed at Sr. No. 7-12, to grasp the thematic essence, stylistic elements, and literary devices employed by the poets.
• Comprehend and critically engage with the content presented in the book "Making Connections" by Kenneth J. Pakenham, 3rd Edn., CUP, particularly focusing on SECTION-III (Aspects of Language) and SECTION-IV (Sustaining Planet Earth), to explore various dimensions of language and environmental sustainability.

• Evaluate and articulate insights gained from the "Beyond the Reading" sections of the textbook "Making Connections," applying critical thinking and analytical skills to construct well-structured essay-type responses reflecting deeper comprehension and synthesis of the content discussed in the text.

COURSE 4 & 5 STREAM 1- PUNJABI (ELECTIVE)

ਪੰਜਾਬੀ (ਚੋਣਵੀਂ) ਕੋਰਸ ਸਸ ਿੱ ਖਣ ਦੇ ਨਤੀਜੇ:

• ਹਿੰਦ ਵਿਦਾਰ ਪੰਜਾਬੀਆਂ ਨੂੰ ਖੁੱਲੀ ਚੀਂਕ ਨਾਲ ਸਰਕਾਰਿ ਨੂੰ ਲਗਦੀ ਨਹੀਂ ਹੈ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨੂੰ ਬਹੁਤ ਪ੍ਰੋਸਟਾਦ ਵਾਲੀ ਮਾਧੋਕ ਥਾਂ। ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨੂੰ ਪੂੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਅਕਸਰ ਪ੍ਰਭਾਵਿਤ ਕਰਦਾ ਹੈ।

• ਹਿੰਦ ਵਿਦਾਰ ਦਾ ਸੰਦੇਸ਼ਕ ਹਿੰਦੀ ਮਾਧੋਕ ਹਿੰਦੀਆਂ ਨੂੰ ਲੇਪਨ, ਹੇਡੀਆਂ ਵਜੋਂ ਜਾਂ ਹਿੰਦੀ ਨੂੰ ਲਗਦਾ ਹੈ। ਹਿੰਦੀਆਂ ਦੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਹਿੰਦੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਖੁਦਾਰ ਫੈਲੀ ਰਕਮ ਨੂੰ ਚੀਂਕਰ ਹਿੰਦੀ ਮਾਧੋਕ ਹਿੰਦੀਆਂ ਨੂੰ ਿਰਪੇਸ ਚਣੋਂ ਬਾਰੇ ਰ੪ ਬਾਰੇ ਵਾਲਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਆਪਣੀਆਂ ਪੰਜਾਬੀ ਮਾਧੋਕ ਚੀਂਕ ਨੂੰ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।

• ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਬਹੁਤ ਲਗਦਾ ਹੈ। ਪੰਜਾਬੀ ਸਾਹਿਤ ਵਿਚ ਲਗਦਾ ਹੈ।
COURSE 4 & 5 STREAM 1- HINDI ELECTIVE

Through this course students will be able to

- Gain knowledge about Hindi upanayanas - premchand, lakshmiNarayan aadi ke upanyason evam kahaniyon ka samikshatmak gyaan
- Understand Drama Texts in Their Culture and Historical Contexts.
- Analyse full length dramas using appropriate terminology and common theatrical figures.

COURSE 4 & 5 STREAM 1- PHILOSOPHY (INDUCTIVE LOGIC AND ENVIRONMENTAL ETHICS)

Through this course students will be able to

- Know about Simple Enumeration, Scientific Induction and Analogy.
- Understand about Indian Logic, Nyaya Syllogism and Anumana in Nyaya Darshan
- Know about the nature of Environmental Ethics
COURSE 4 & 5 STREAM 1 - PSYCHOLOGY
(EXPERIMENTALPSYCHOLOGY–II)

Through this course students will be able to

- Understand the basic concepts and principles of sensation, perception, attention, memory, forgetting, thinking, problem solving and concept formation.
- Apply the theories and approaches of experimental psychology to explain various psychological phenomena and processes.
- Develop the skills of designing, conducting, analyzing and reporting psychological experiments using appropriate methods and tools.
- Critically evaluate the strengths and limitations of experimental psychology as a scientific discipline and its ethical implications.

COURSE 4 & 5 STREAM 1 PSYCHOLOGY PRACTICAL

Through this course students will be able to

- Apply the fundamental concepts of empirical researches
- Demonstrate knowledge of experimental psychology in understanding psychological process empirically
- Understand and apply the basic concepts and methods of experimental psychology.
- Design, conduct, and report psychological experiments using appropriate statistical techniques and software tools.
- Develop critical thinking and analytical skills in evaluating psychological research and evidence.
- Demonstrate ethical awareness and responsibility in conducting psychological experiments involving human participants.

COURSE 4 & 5 STREAM 1 SOCIOLOGY - SOCIAL CHANGE IN INDIA

Through this course students will be able to

- Explain Indian society and culture in sociological perspective.
- Analyse the concept of social and cultural change.
- Explain the concept of static aspect of society.
COURSE 4 & 5 STREAM 2- MATHEMATICS

PAPER–I: STATICS AND VECTOR CALCULUS

PAPER–II: SOLID GEOMETRY

Through this course students will be able to

- Apply numerical methods to obtain approximate solutions to mathematical problems
- Demonstrate precise and proficient use of complex functions continuity, differentiability
- Know about parallelogram law, triangle law, polygon law, Lami’s Theorem, (z-µ) theorem, Vector differentiation, Vector identity and Vector integration
- Understand the concept of Cylinder as surface generated by a line moving parallel to a fixed line and through fixed curve.
- Understand about the concept of Cone with a vertex at the origin as the graph of homogeneous equation of second degree in x, y, z

COURSE 4 & 5 STREAM 2 COMPUTER SCIENCE

DATA STRUCTURES & PROGRAMMING LANGUAGE USING C++

Through this course students will be able to

- Choose appropriate data structure as applied to specified problem definition.
- Handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.
- Use linear and non-linear data structures like stacks, queues, linkedlist etc.
- Understand internal representation of Linear and nonlinear datastructures.
- Apply appropriate algorithms to solve selected problems, both manually and by writing computer programs.

COURSE 4 & 5 STREAM 2 COMPUTER SCIENCE

DATA STRUCTURES & PROGRAMMING LANGUAGE USING C++

LAB (PRACTICAL)

Through this course students will be able to

- Do Practical based on Data Structures & Programming Language Using C++
COURSE 4 & 5 STREAM 2 ECONOMICS

INTERNATIONAL ECONOMICS AND PUBLIC FINANCE

Through this course students will be able to

- Discuss and explain trade policy issues such as protectionism and free trade.
- Understand and apply the principle of comparative advantage.
- Apply partial equilibrium models in analysing the economic effects of trade policy instruments such as tariffs and quotas.
- Understand the concept of Balance of Payments and its disequilibrium
- Critically analyse different theories of determination of exchange rate.

COURSE 4 & 5 STREAM 3

HISTORY (HISTORY OF THE PUNJAB)

Through this course students will be able to

- Know about Socio-Religious condition of the Punjab around 1500 A.D.
- Attain the knowledge about Foundation of Sikh Panth, Guru Nanak Dev and his Teachings.
- Understand about Development of the Sikh Panth, Creation of Khalsa and Circumstances leading to the creation of the Khalsa
- Know about Political Organisations of the Sikhs in the 18th Century.

COURSE 4 & 5 STREAM 3 GEOGRAPHY

(GEOGRAPHY OF PUNJAB)

Through this course students will be able to

- Understand the regional setting of Punjab State in detail through physical and political maps.
- Examine the pattern of select population characteristics.
- Study the distribution of major crops, industries and transport links in the state.
- Understand the intra-regional variations in the select aspects.
MAPWORK AND PRACTICAL GEOGRAPHY (PRACTICAL)

Through this course students will be able to

• Apprise the students with symbolization of different types of geographical data and depiction of various spatial data.
• Provide training in application of various graphical methods of depicting geographic data.
• Train the students to interpret the topographical sheets at different scales course Content.

COURSE 4 & 5 STREAM 3 POLITICAL SCIENCE

INDIAN POLITICAL SYSTEM

Through this course students will be able to

• Understand the basic structure of federal system
• Know about electoral process in India.
• Critically Analyse the Indian Democracy.
• Understand the foreign Policy its determinants and relevance.
• Critically analyse the India’s bilateral relations with major powers and its neighbour countries.

COURSE 4 & 5 STREAM 3 ECONOMICS

INTERNATIONAL ECONOMICS AND PUBLIC FINANCE

Through this course students will be able to

• Discuss and explain trade policy issues such as protectionism and free trade.
• Understand and apply the principle of comparative advantage.
• Apply partial equilibrium models in analysing the economic effects of trade policy instruments such as tariffs and quotas.
• Understand the concept of Balance of Payments and its disequilibrium.
• Critically analyse different theories of determination of exchange rate.

COURSE 4 & 5 STREAM 4 PHILOSOPHY

INDUCTIVE LOGIC AND ENVIRONMENTAL ETHICS

Through this course students will be able to
• Know about Simple Enumeration, Scientific Induction and Analogy.
• Understand about Indian Logic, Nyaya Syllogism and Anumana in Nyaya Darshan
• Know about the nature of Environmental Ethics

COURSE 4 & 5 STREAM 4
PSYCHOLOGY EXPERIMENTAL

PSYCHOLOGY–II

Through this course students will be able to

• Explain the concepts and uses of various statistical techniques
• Implicate the principles of psychophysics in sensation and perception theoretically
• Know about Weber-Fechner law, Concept of Absolute and Differential Thresholds

COURSE 4 & 5 STREAM 4 PSYCHOLOGY PRACTICAL

Through this course students will be able to

• Apply the fundamental concepts of empirical researches
• Demonstrate knowledge of experimental psychology in understanding psychological process empirically

COURSE 4 & 5 STREAM 4 SOCIOLOGY - SOCIAL CHANGE IN INDIA

Through this course students will be able to

• Explain Indian society and culture in sociological perspective.
• Analyse the concept of social and cultural change.
• Explain the concept of static aspect of society.

COURSE EPC - DRAMA AND ART IN EDUCATION

Through this course students will be able to

• Develop imagination and sense of appreciation of art and interest in art.
• Develop aesthetic sense.
• Prepare effective teaching aids.
• Gain basic knowledge about colour scheme.
• Use drama processes to examine their present and to generate new knowledge
• Understand the world and themselves in it.

COURSE 6 ENVIRONMENTAL STUDIES

Through this course students will be able to

• Discuss on objective and Need of Environment Education.
• Reflect Importance of environment education in School Curriculum.
• Appreciate the Role of Various media in environment education.
• Analyse Environment crisis.
• Organize different Activities related to Environment Education
• Perform activities for awareness of Environment Education.
• Utilize the acquired knowledge to maintain the environmentally friendly philosophy with sustainability of various environmental resources. Also, to create awareness amongst others to keep the environment safe and clean.

Semester V

Course 1 UNDERSTANDING THE LEARNER

Through this course students will be able to

• Understand the growth and development of the learner and its importance in the learning process
• Understand characteristics of adolescents with reference to socio-cultural factors Reflect upon various developmental theories.
• Analyse the different learning approaches and their educational implications.
• Understand the role of teacher in holistic development of learner and learning.
• Understand the importance of individual differences in normal classroom.
• Understand the psychology of learners with special needs and teach them accordingly.

Course 2 EDUCATIONAL TECHNOLOGY AND ICT FOR TEACHING AND LEARNING

Through this course students will be able to
● Understand the concept and scope of Educational Technology.
● Reflect upon the evolution of Education Technology.
● Explore the modern innovations in teaching and learning process.
● Analyse the anatomy of teaching and learning.
● Reflect upon various phases of teaching.
● Become an ICT skilled teacher.

Course 3 INCLUSIVE EDUCATION
● Understand the concept and nature of inclusive education.
● Develop awareness towards diverse needs of special students.
● Reflect upon various policies and programmes associated with Inclusive education in Indian Context.
● Develop an attitude to foster inclusive education

WESTERN METAPHYSICS AND EPISTEMOLOGY
● Understand the nature, scope, and utility of Western philosophy.
● Examine the characteristics and critically evaluate both mechanical and dialectical materialism.
● Define and explore the meaning and characteristics of monism.
● Define and explore the meaning and characteristics of dualism.
● Define and explore the meaning and characteristics of pluralism.

ABNORMAL PSYCHOLOGY - I
● To understand the concept and criteria of abnormality and the various approaches towards psychopathology.
● To identify the biological, psycho-social and socio-cultural causes of abnormal behaviour.
● To learn about the effects of stress and coping strategies on physical and mental health.
● To gain knowledge about the symptoms, causes and general treatment of stress related disorders.

ABNORMAL PSYCHOLOGY–I (PRACTICAL)
● To understand the concept and types of abnormal behavior and the factors influencing it.
● To develop skills in administering and interpreting psychological tests for assessing abnormality, such as word association test, adjustment inventory, stress scale, etc.
• To apply the knowledge of abnormal psychology to real-life situations and to suggest appropriate coping strategies and interventions.
• To develop ethical awareness and sensitivity while dealing with individuals with abnormal behavior.

SOCIAL THOUGHT

• To understand the historical and intellectual context of the emergence of sociology as a discipline.
• To appreciate the contributions of the classical sociological thinkers to the development of sociological theory and concepts.
• To analyze the key ideas and perspectives of Comte, Spencer, Marx, Weber, and Durkheim on various aspects of social reality.
• To apply the sociological insights of the classical thinkers to contemporary social issues and problems.

MATHEMATICS PAPER–I: DYNAMICS

• To understand the concepts and principles of rectilinear motion, Newton’s laws of motion, and motion of two particles connected by a string.
• To apply the concepts and principles of motion along a smooth inclined plane, variable acceleration, and simple harmonic motion to solve problems.
• To analyze the curvilinear motion of particle in a plane, velocity and acceleration, projectiles, and oscillations using mathematical tools and techniques.
• To evaluate the work, power and energy of a system, and the theorem of conservation of energy using examples and applications.

MATHEMATICS PAPER–II: NUMBER THEORY

• To introduce the basic concepts and properties of divisibility, primes, and number-theoretic functions in integers.
• To develop the skills of solving linear congruences, applying the Chinese remainder theorem, and using Fermat’s and Euler’s theorems.
• To explore the applications of number theory to cryptography and factorization methods.
• To enhance the logical and analytical thinking of the students and prepare them for further studies in mathematics.
DATA BASE MANAGEMENT SYSTEM & ORACLE (THEORY)

- To understand the concepts and principles of database systems, such as data models, data independence, and database architecture.
- To learn the relational model and its operations, such as relational algebra, relational calculus, and SQL.
- To design and implement a database using E-R diagrams, normalization, and constraints.
- To apply concurrency control, recovery, security, and protection techniques to ensure the integrity and availability of the database.

DATA BASE MANAGEMENT SYSTEM & ORACLE (PRACTICAL)

- To introduce the students to the concepts and principles of database management systems and Oracle.
- To enable the students to design, implement, and manipulate databases using SQL and PL/SQL.
- To familiarize the students with the features and functionalities of Oracle as a relational database management system.
- To provide the students with practical exposure to database management and Oracle through lab exercises.

ECONOMICS OF DEVELOPMENT

- To understand the meaning and measurement of economic development and the factors that influence it.
- To analyze the nature and characteristics of underdevelopment and the challenges faced by undeveloped countries.
- To learn about the concept and indicators of human development and sustainable development.
- To examine the theories and models of economic growth and development, such as dualism, classical, Marxian, Schumpeter’s, Harrod-Domar, Solow, Rostow, balanced and unbalanced growth, big push, critical minimum efforts, export promotion and import substitution.
- To explore the issues and strategies of capital formation, choice of technique, and planning in underdeveloped countries.

HISTORY HISTORY OF THE WORLD (C 1500-1956 AD)
• To acquire factual knowledge about the major events and processes of world history from 1500 to 1956 AD, such as the Renaissance, the French Revolution, the World Wars, and the Russian Revolution.

• To develop analytical skills to understand the causes and effects of these historical developments, and to compare and contrast them with other regions and time periods.

• To enhance critical thinking skills to evaluate different sources and interpretations of world history, and to engage in scholarly debates and arguments.

• To appreciate the diversity and complexity of human societies and cultures, and to recognize the interconnections and interactions among them.

WORLD REGIONAL GEOGRAPHY–I (THEORY)

• Understand geographic dimensions of the world regions in terms of their political and administrative characteristics.

• Recognize physical and human resource base and their interface with economic development.

• Analyse Development problems and prospects.

MAP PROJECTIONS (PRACTICAL)

To provide an analytical understanding of constructions, properties, limitations and use of cylindrical and conical map projections.

COMPARATIVE POLITICAL SYSTEMS (UK & USA)

• To understand the meaning, scope, and approaches of comparative government and politics, with a focus on the political systems of the UK and the USA.

• To analyze the similarities and differences between the executive, legislative, judicial, and federal features of the UK and the USA, and their implications for democracy and governance.

• To examine the role and impact of political parties, pressure groups, and civil society in the UK and the USA, and how they influence public policy and political culture.

• To develop critical thinking, research, and communication skills through comparative study of political concepts, institutions, and processes.

ECONOMICS OF DEVELOPMENT

• To understand the meaning and measurement of economic development and the nature and characteristics of underdeveloped countries

• To learn about the concept of human development index and sustainable development and their implications for policy making
• To analyze the phenomenon of dualism and the models of unlimited supply of labour and their relevance for developing economies.
• To study the various models of growth and their assumptions and implications for economic development.
• To examine the different strategies of economic development such as balanced and unbalanced growth, big push, critical minimum efforts, export promotion and import substitution.
• To explore the issues of capital formation, choice of technique, role of planning and problems of planning in underdeveloped countries.

WESTERN METAPHYSICS AND EPISTEMOLOGY

• Understand and critically analyze different concepts and problems within Western epistemology.
• Investigate topics such as Gettier’s Problem, different kinds of knowledge, skepticism, justification of knowledge, representational theories of knowledge of the external world, and phenomenalism.

ABNORMAL PSYCHOLOGY–I (THEORY)

• To understand the concept and criteria of abnormality and the various approaches towards psychopathology.
• To explore the biological, psycho-social and socio-cultural causes of abnormal behaviour.
• To learn about the stress and coping mechanisms and the stress related disorders.
• To gain knowledge about the symptoms, causes and general treatment of pain.

EPC–IV DEVELOPING ICT COMPETENCIES

• To enable the student teachers to know about computer and its components.
• To enable the student teachers to make slide presentation.

Semester VI

GENERAL ENGLISH

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

1. Comprehension and Analysis of The Guide by R.K. Narayan-
   - Students will demonstrate a thorough understanding of the novel "The Guide" by R.K. Narayan.
- They will analyse the characters, themes, plot developments, and literary techniques employed by Narayan to convey the narrative effectively.

- Through critical engagement with the text, students will explore the socio-cultural, philosophical, and moral dimensions depicted in the novel, fostering a deeper appreciation for Indian literature and storytelling traditions.

2. Appreciation and Interpretation of Dramatic Texts-

- Students will study and appreciate the dramatic texts "The Will," "Villa for Sale," "progress" "The Monkey's Paw," "sorry wrong number," and "no eggs! No eggs!" from the anthology "Glimpses of Theatre" by Guru Nanak.

- They will analyse the structure, themes, characters, dialogues, and dramatic devices utilized in these texts to convey meaning and evoke emotions.

- Through close reading and discussion, students will interpret the socio-cultural contexts, moral dilemmas, and human experiences presented in the dramatic works, enhancing their understanding of theatrical literature and performance arts.

3. Exploration of Theatrical Elements and Techniques-

- Students will explore theatrical elements and techniques employed in the selected plays, focusing on staging, characterization, dialogue delivery, and thematic development.

- They will analyze the role of setting, costume, lighting, sound, and other production aspects in enhancing the dramatic impact and conveying thematic messages effectively.

- Through practical exercises and discussions, students will gain insights into the collaborative nature of theatre production and the creative processes involved in bringing scripts to life on stage.

4. Reflection and Critique of Dramatic Representations-

- Students will reflect on and critique various aspects of dramatic representations in the selected texts.

- They will evaluate performances, adaptations, and interpretations of the plays, considering directorial choices, actor performances, and audience reception.

- Through written reflections and discussions, students will develop a critical perspective on theatrical aesthetics, interpretation, and reception, enriching their understanding of the dynamic relationship between text, performance, and audience interpretation.
By achieving these Course Learning Outcomes, students will develop a holistic understanding of literary and dramatic texts, as well as critical insights into the socio-cultural contexts and thematic concerns addressed in these works. Additionally, they will cultivate analytical, interpretive, and evaluative skills essential for engaging with diverse forms of literature and performance arts.

चेट्टी प्रश्नची
(विभागविद्यांदु प्रश्नची)
वी.डी.वी.आय.हे.डी., मानवसत- VI

वेळम वर्केम/सिंघट वर्केम
पाठ्यष्टम रे मानवसत वेळ वर्केम, रिशिसतची जेता वेको:

1. मानवसत रे रंध-रंध तुंग निचे: ताटव, वर्हिड, तावृल आयटी रे रिसिडिगिमल मढे रस्तवास्तित विविधीत्व रा रिमागाच व熟悉的 रे。
2. मानवसत रे तुंग ची मिर्दायर आल्लेला मडे रिसेसन वर्केम रे जेता वेको।
3. ताटव अडे ताल्ल इसिलीया बलाभव सुवार्ड, मडे ताटवी तेलां रा रिमागाच व熟悉च रे।
4. मानवसत रे रंध-रंध तुंग लीपी इसिमेड्डल अडे रिसव रुलिंडीया रा रिमागाच व熟悉च रे।
5. रिस्डिड इसिलीया वापित सुवार्ड अडे इसिमेड्डल की आलेसन वगत रे।

जो.वी.टी.वी.आय.हे.डी./वी.वी.आय.मी.-डी.आय.हे.डी.
मानवसत- VI

वेळम वर्केम/सिंघट वर्केम

1. मानवसत रे रंध-रंध तुंग निचे: ताटव, वर्हिड, तावृल आयटी रे रिसिडिगिमल मढे रस्तवास्तित विविधीत्व रा रिमागाच व熟悉的 रे।
2. वर्हिड इसिलीया वापित सुवार्ड अडे इसिमेड्डल की आलेसन वगत रे।
3. रिमागाचत्व लीपी बुकेंच वापितक निचे तांद लेऱम विजियंद रच्यें अडे मठट मंडीया रे मानवसत अडे रिसेसन वगत ईं मानवसत अडे रिमागाच व熟悉च रे।
4. लेकवर तकली रे तत्त्वी आल्लेला बलाभव रुलिंडीया रा रिवर्को व熟悉च रे।
5. मानवसत रे तुंग ची मिर्दायर आलेसन अडे रिसेसन वगत रे जेता वेको।
SCHOOL MANAGEMENT

- Understand the concept of School Organization and Management.
- Understand TQM and its application in day to day working of schools.
- Perform different functions of Schools.
- Perform as a teacher in an efficient and coordinated manner in a School.

PEACE EDUCATION AND HAPPINESS

- Understand the concept and importance of Peace.
- Understand Various Initiatives taken for building Peace in the World.
- Explain the Concept and Need of Peace Education.
- Perform the role in a better way to promote Peace Education.

LIFE LONG EDUCATION

- Explain the concept and need of Life Long Education.
- Understand the functioning of various agencies of adult and continuing education in India and abroad.
- Explain the various trends related to Adult and Continuing Education.
- Understand and contribute to the global perspectives of Life Long Education in future.

HEALTH EDUCATION

- Understand the concept and need of Health and Health Education.
- Feel the importance of balanced diet and Personal Hygiene in their lives.
- Understand role of various agencies in promoting Health Education in rural areas.
- Perform their role as an effective Teacher.

Value Education

- Understand concept and various sources of Values and Value Education.
- Understand the role of various agents of education in promoting value education.
- Promote Value Education by knowing about its various strategies.
- Inculcate values among their students in their future role.

Guidance and Counselling

- Understand the concept and need of guidance and Counselling.
- Know the various agencies of guidance at District, State and National level
- Analyze the relationship between guidance and counselling.
Become acquainted with the skills and qualities of an effective counsellor.

INDIAN METAPHYSICS AND EPISTEMOLOGY

- To understand the salient features of Indian philosophy and the distinction between orthodox and heterodox systems.
- To learn about the concepts of Atman and Brahman in Upanishads and their implications for the nature of reality and self.
- To explore the materialist philosophy of Charvaka and its critique of the supernatural and the Vedas.
- To study the dualist philosophy of Samkhya and its explanation of the origin and evolution of the universe from Purusha and Prakriti.
- To examine the non-dualist philosophy of Shankaracharya and his doctrine of Maya or illusion.
- To analyze the Nyaya theory of knowledge and its four sources of valid cognition (Pramanas).
- To appreciate the Buddhist theory of causation (Pratityasamutpada) and its rejection of the notion of a permanent self or substance.
- To compare the Vaisheshika theory of categories and its enumeration of the six types of reality.
- To evaluate the Jain doctrine of Anekantvada or non-absolutism and its method of Syadvada or conditional predication.
- To understand the Sikh concept of Akal Purakh or the timeless being and the creation of the world.

AESTHETICS

- To introduce the students to the nature, scope and problems of aesthetics
- To familiarize the students with the concepts of form, content, beauty and sublime in art.
- To explore the Indian theory of rasa and its application to various forms of art.
- To examine the role of aesthetics and creativity in Gur Sikh Matt
- To appreciate the diversity and richness of different forms of art such as architecture, sculpture, painting, music, poetry and theatre.

ABNORMAL PSYCHOLOGY–II (THEORY)

- To understand the symptoms, etiology and treatment of various anxiety related disorders, somatoform disorders, dissociative disorders, personality disorders, mood disorders and schizophrenia
To learn about the different types of therapies used to treat psychological disorders, such as psychodynamic, behavioral, cognitive-behavioral, humanistic, existential and family therapy.

To develop critical thinking and analytical skills in evaluating the theories and research in abnormal psychology.

To apply the knowledge of abnormal psychology to real-life situations and case studies.

SOCIAL RESEARCH AND SCIENTIFIC METHOD

- Define research and explain key research terms.
- Describe the research process, including its activities, skills, and ethical considerations.
- Understand the importance of research ethics and integrate ethical considerations into the research process.
- Critique published journal articles that use primary research methods in the field.

LINEAR ALGEBRA

- To understand the basic concepts of groups, rings, fields, and vector spaces.
- To learn how to use linear transformations, matrices, and isomorphisms to manipulate and analyze vector spaces.
- To apply the rank-nullity theorem and the invariance of dimension to solve problems involving subspaces and quotient spaces.
- To explore the properties and applications of linear operators.

NUMERICAL ANALYSIS

- To provide the numerical methods of solving the non-linear equations, interpolation, differentiation, and integration.
- To improve the student’s skills in numerical methods by using the numerical analysis software and computer facilities.
- To gain experience in the implementation of numerical methods using a computer.
- To trace error in these methods and need to analyze and predict it.

BASIC OF INTERNET TECHNOLOGIES (THEORY)

- To introduce the students to the concepts and applications of internet, intranet, and extranet.
- To familiarize the students with the working of the World Wide Web and web browsing techniques.
- To enable the students to design and develop static web pages using HTML and CSS.
• To enhance the students’ skills in web designing using DHTML and programming techniques.

INFORMATION TECHNOLOGY (PRACTICAL)

• To develop the skills of designing, developing, and testing computer programs using various programming languages and tools.
• To apply the concepts of data structures, algorithms, and databases to solve real-world problems.
• To enhance the knowledge of web development, networking, and security issues in information technology.
• To foster the creativity and innovation of students through project-based learning and collaborative work.

QUANTITATIVE METHODS FOR ECONOMISTS

• To introduce the basic concepts of sets, relations, functions, limits, continuity, and derivatives, and their applications in economics.
• To familiarize the students with the measures of central tendency, dispersion, skewness, and kurtosis, and their use in descriptive statistics.
• To develop the skills of correlation and regression analysis, and their use in estimating the relationship between variables.
• To expose the students to the methods of interpolation and index numbers, and their use in filling the missing values and comparing the changes in prices.

HISTORY OF THE PUNJAB (1799-1966)

• Describe the political, social, and economic conditions of the Punjab region under different rulers and regimes from 1799 to 1966.
• Analyze the causes and consequences of various events and movements that shaped the history of the Punjab, such as the Anglo-Sikh Wars, the gurdwara reforms, and the nationalist activities.
• Compare and contrast the perspectives and experiences of different groups and communities in the Punjab, such as the sikhs, the hindus, the muslims, and the british.
• Evaluate and synthesize primary and secondary sources of historical evidence and present their findings in clear and coherent written and oral forms.

GEOGRAPHY OF INDIA (THEORY)
• To foster comprehensive understanding of physical, human and economics resource base of India.
• To help the students to acquire knowledge of the geographical diversity of India and its regions.
• To enable the students to appreciate the interrelationship between physical and human aspects of India’s environment.
• To develop the skills of map reading, interpretation and analysis of spatial data related to India.
• To enhance the awareness of the students about the contemporary issues and challenges faced by India in terms of environment, development and geopolitics.

MAP PROJECTIONS-II AND FIELD WORK (PRACTICAL)

• To provide an analytical understanding of use of common map projections
• To acquaint the students with the importance of field work as one of the methodologies in geography.
• To sensitize the students about pre-field work and post-field work i.e. data processing and analysis and writing of field work report

INTERNATIONAL POLITICS: THEORY AND PRACTICE

⚫ Understand the meaning, nature, and scope of international politics.
⚫ Familiarize students with major theoretical approaches, such as realism and idealism.
⚫ Analyze factors influencing national power and the international system.
⚫ Explore historical and contemporary issues, including the Cold War, emerging world order, global environment, and international terrorism.

QUANTITATIVE METHODS FOR ECONOMISTS

⚫ Introduce basic concepts and techniques of quantitative methods in economics.
⚫ Apply quantitative methods to solve economic problems and analyze data.
⚫ Enhance mathematical and analytical skills for further studies in economics.

Internship I (4 weeks) FIELD ENGAGEMENT WITH SCHOOL AND PERSPECTIVE PAPERS

• To provide students with an opportunity to observe the teaching of experienced teachers and learn from their practices
• To familiarize students with the types of records maintained in the school and their importance for effective teaching and learning.
• To expose students to the practices of inclusive education and how to cater to the diverse needs of learners.
• To enable students to interact with the principal, teachers, and students of the school and understand their perspectives and challenges.
• To enhance students’ subject knowledge and pedagogical skills by visiting subject-specific laboratories, museums, and places of interest
• To develop students’ sensitivity and awareness towards the educational facilities and issues of rural, urban slum, and border area schools.

SEMESTER–VII

UNDERSTANDING THE LEARNING PROCESS

⚫ Understand the concept of learning.
⚫ Know various Learning theories and apply it in day to day life.
⚫ Understand various Learning styles and apply it for Classroom learning.
⚫ Construct knowledge for Learning
⚫ Use various techniques of learning and creativity.
⚫ Understand various Cognitive and affective mental processes and learning
⚫ Understand the role of a teacher in holistic perspective of learner and learning

FOUNDATIONS OF CURRICULUM DEVELOPMENT

⚫ Understand the concept of curriculum and development.
⚫ Explain various trends in Curriculum Organization and Development.
⚫ Develop a broad perspective on curriculum development.
⚫ Explain various types and approaches to curriculum development.
⚫ Understand various models and steps in curriculum development.
⚫ Understand the different models and patterns of curriculum design.
⚫ Design the curriculum.

ASSESSMENT FOR LEARNING

⚫ Understand the concept of assessment and its role in teaching-learning process.
⚫ Develop the skill of assessing various Cognitive, Affective and Conative domains of Learning.
⚫ Develop the tool for assessment.
● Develop skills of standardization of an assessment tool.
● Understand the different dimensions related to assessment procedures, tools and techniques.
● Examine the issues and concerns of assessment and evaluation practices in schools.

POLICY FRAMEWORK AND CONTEMPORARY ISSUES IN INDIAN EDUCATION

● Understand the commissions and Policies related to education in India.
● Know and respect the Constitution of India.
● Understand the various Constitutional provisions associated with Education in India.
● Understand the contemporary issues associated with Education in Indian society.
● Understand the role of education in addressing inequalities in Indian Society.
● Critically appraise various aspects of Education.
● Respect human rights.

EDUCATION AND DEVELOPMENT

● Understand various expectations of society from education.
● Educate for democracy and integration.
● Understand the relevance of education in relation to multicultural society.
● Educate for sustainable development.

Pedagogy of a School Subject – I (PS-I) and Pedagogy of a School Subject – II (PS-II)

● Describe some important methodologies & techniques of teaching subject.
● Prepare and use appropriate audio-visual teaching aids for effective teaching of school subject.
● Differentiate different types of approaches of pedagogy of a school subject.
● Know the concept of evaluation.
● Understand different types of test.
● Formulate macro lesson plan.
● Comprehend different types of micro teaching skills.

Reading and Reflecting on Texts
● Develop their capacities as readers and thinkers.
● Explain different types of Texts.
● Utilize reading resources and policy documents.
● Enhance their reading competencies.

SEMESTER–VIII
Paper I & II: SCHOOL INTERNSHIP Pedagogy of School Subject – I (PS I) Pedagogy of School Subject – II (PS II)

● Apply theoretical knowledge of pedagogy in real classroom situations.
● Plan, execute, and evaluate lessons based on different teaching and learning models.
● Use teaching-learning materials, methods, and techniques effectively.
● Observe, reflect, and analyze aspects of school functioning.
● Foster professionalism, collaboration, and lifelong learning attitudes.

FIELD ENGAGEMENT WITH COMMUNITY

• To enable student-teachers to understand the socio-cultural and economic background of the community and its impact on education.
• To develop skills of conducting surveys, collecting and analyzing data, and preparing reports.
• To sensitize student-teachers to the issues and problems faced by the community and the role of education in addressing them.
• To foster a sense of social responsibility and civic engagement among student-teachers.

B.Sc. BED INTEGRATED (4 YEAR DEGREE PROGRAM)

PROGRAMME LEARNING OUTCOMES

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

● Analyze the secondary school curriculum of various schools affiliated to different Boards.
● Make use of subject specific pedagogical knowledge and skills
• Practice skills and approaches for enhancing understanding of subject matter knowledge to be taught in secondary schools.

• Appreciate the role of teacher in prevailing socio-cultural and political systems in general and education system in particular.

• To initiate the discourse on education by organizing seminars, debates, lectures and discussion groups for student-teachers.

• To organize inter institutional activities for student-teachers on themes of educational significance and also make them participate in such events. A participatory teaching approach is adopted to help student-teachers develop reflective thinking and questioning skills.

• To provide strong professional base through diverse educational experiences.

PROGRAM SPECIFIC OUTCOMES

• Enrichment of Intellectual and Epistemic Tradition: The programme develops students’ wide understanding of and on the major concepts, thoughts, and ideas of Applied Statistics, Computer Applications, Dramatic Art (Theatre), Drawing and Painting, Physics, Chemistry, Mathematics, Botany, Zoology. It also enriches their analytical, critical, creative faculties.

• Amelioration of Problem-Solving Skills: The programme prepares students to contextualize and to rationalize the principles of scientific enquiry, theoretical and philosophical thoughts, analytical and creative thinking for solving problems and making decision in the socio-pragmatic realities of life. These problem-solving skills are instrumental in finding, analysing, evaluating and applying information systematically so that judicious decision could be made.

• Appropriate Application of Methodological Tools: The programme makes a candid attempt of familiarizing students with some relevant methodological tools which help them exploring the underlying ideas, thoughts, concepts and meanings in the available discourses of law, humanities, social sciences, art and aesthetics etc. A text is embedded into a rich cultural, social, pragmatic, and political realities and the apposite application of those methodological tools may unravel the textual
and contextual richness.

- Developing Communicative Competence: The programme intends to develop grammatical and communicative competence among students and make them aware of the nature, form and function of language. Language is not merely a medium to communicate but is more fundamental to the process of the formation of ideas, thoughts and concepts. The programme therefore nurtures listening, writing, speaking and reading skills of students which allow them to communicate effectively in textual, personal and interpersonal contexts so that the discursive practices may be enriched and the trajectory of knowledge may get strengthened.

- Environment and Sustainability: The unprecedented growth and development in the world on industry, technology, trade and commerce etc have damaged the balance between nature and culture. Environment, ecology and all-natural resources have been exploited to such a level that many of them are exhausted. Looking at these miserable conditions, the programme intends to prepare students to respond to some major issues of environment and sustainability.

**SEMESTER–I**

Course 1 (YOGA EDUCATION)

Through this course students will be able to

- Know the historical and philosophical background of Yoga.
- Solve health related issues with the help of Pranayama’s
- Use meditation for reducing day to day stress
- Correlate Yoga with Education

Course 2 (ENGLISH)

Through this course students will be able to

- Speculate and acquire the basic knowledge of English literature, grammar, and composition.
- Analyse the difference between prose and poetry.
- Trace and learn the skill of writing in English.

Course 3 (PUNJABI)

Through this course students will be able to
• Speculate and acquire the basic knowledge of Punjabi literature, grammar, and composition.
• Analyse the difference between prose and poetry.
• Trace and learn the skill of writing in Punjabi.
• Deduce literal comprehension of the texts.

Course 4, 5, 6, Stream 1 (PHYSICS)

PAPER A - MECHANICS

Through this course students will be able to

• Understand the concept of Cartesian coordinates system, spherical polar coordinate and plane polar coordinate
• Understand the concept of various forces in nature and about the rotation of earth about its axis and various laws of Kepler and equation of orbit.
• Know about the different frames of references like internal frames and non-internal frames and various virtual forces existing in non-inertial frames of references.
• Understand the concept of collisions (elastic and inelastic) in lab system and centre of mass system and various scattering occurring in both systems.
• Understand the concept of ether and about special theory of relativity.

PAPER B - ELECTRICITY AND MAGNETISM

Through this course students will be able to

• Understand Basic ideas of Vector Calculus Gradient, Divergence, curl
• Understand the basic idea of Work and potential difference.
• Understand Poisson and Laplace’s equation
• Know Interaction between moving charges and force between parallel currents

Course 4, 5, 6, Stream 1&2 (CHEMISTRY)

INORGANIC CHEMISTRY-I

Through this course students will be able to

• Understand structure of the atom.
• Understand periodic properties of atom.
• Understand ionic solids and the weak interactions.
• Understand chemical bonding.
ORGANIC CHEMISTRY-I

Through this course students will be able to

- understand concept of hybridisation
- understand alkenes and alkynes
- understand Alkyl Halides and Cycloalkanes
- understand Arenes and Aromaticity

MATHEMATICS

PAPER –I: ALGEBRA

Through this course students will be able to

- Understand foundation knowledge of algebraic concepts.
- Learn to analyze mathematical situations, formulate equations, and solve them systematically.
- Understand the geometric interpretation of linear transformations and apply algebraic techniques to solve real-world problems

PAPER –II: CALCULUS AND TRIGONOMETRY

Through this course students will be able to

- Understand basic concepts of limits, continuity, and differentiability.
- Apply differentiation techniques to algebraic, trigonometric, and exponential functions.
- Explore circular and hyperbolic functions.
- Learn De-Moivre’s theorem and its applications.
- Understand inverse trigonometric functions.

Course 4, 5, 6, Stream 2(BOTANY)

PAPER –I A: DIVERSITY OF MICROBES

Through this course students will be able to

- learn Algae: General characters, classification and economic importance
- learn Viruses, Bacteria
- learn Classification and Economic Importance of Fungi
- learn Basidiomycotina; Deuteromycotina
PAPER –I B: DIVERSITY OF CRYPTOGRAMS

Through this course students will be able to

- know about the diversity of Cryptogams and Phanerogams.
- understand the life cycle pattern of Bryophytes, Pteridophytes
- understand the important characteristics of Psilopsida, Lycopsida, Sphenopsida and Pteropsida
- understand the structure, reproduction in Rhynia,
- understand the life cycle pattern of Lycopodium, Selaginella. Equisetum, Pteris and Marsilea

Course 4, 5, 6, Stream 2(ZOOLOGY)

ZOO –I A: CELL BIOLOGY

Through this course students will be able to

- understand about the structural and functional unit of life.
- understand the different types of fiscatives \fixation and staining techniques.
- understand about different cell organelles and also to draw their detailed structures.
- learn about transformation in cancer.
- get an elementary idea of cellular basis of immunity.

ZOO –I B: BIODIVERSITY-I (PROTOZOA-ANNELEIDA)

Through this course students will be able to

- To enable the students to learn about different phylums.
- To enable the students to understand about parazoa and coelentrata
- To enable the students to understand protozoans
- To enable the students to learn about the characteristic features of aschelmimthes and annelida

Course EPC -I LIFE SKILLS EDUCATION

Through this course students will be able to

- Understand the concept and need of life skills in life.
• Correlate life skills with Success in life.
• Develop the skill of creative thinking, decision making and problem-solving ability.
• Manage stress using various Stress coping strategies.

SEMESTER–II

Course I ENVIRONMENTAL EDUCATION

Through this course students will be able to

• Reflect upon the concept and need of environmental education.
• Define major eco-systems and their conservation.
• Understand the role of different agencies in the protection of environment.
• Develop desirable attitude, values and respect for protection of environment.

Course 2 ENGLISH

Through this course students will be able to

• Identify and understand the latest trends in poetry, prose and plays.
• Develop skills to evolve ideas into expressions
• Apply the learnt skills in constructive writing

Course 3 (PUNJABI)

Through this course students will be able to

• Speculate and acquire the basic knowledge of Punjabi literature, grammar, and composition.
• Analyse the difference between prose and poetry.
• Trace and learn the skill of writing in Punjabi.
• Deduce literal comprehension of the texts.

Course 4, 5, 6, Stream 1(PHYSICS)

PAPER A- RELATIVITY AND ELECTROMAGNETISM

Through this course students will be able to
• discuss the key observations and events that led to the development of Einstein’s theory of special relativity and Maxwell’s equations of electromagnetism;
• explain the fundamental principles of special relativity and electromagnetism and the far-reaching connections between them
• use these fundamental physical principles in the analysis of simple problems;
• discuss the experimental basis of these fundamental principles and how this contributed to the subsequent development of fundamental physics.

PAPER B- VIBRATION AND WAVES

Through this course students will be able to

• Know about a variety of physical phenomena, including mechanical and electrical oscillations, mechanical and electromagnetic waves
• Appreciate the wide applicability of vibration and wave concepts.
• Experience the related mathematical description.

Course 4, 5, 6, Stream 1&2 (CHEMISTRY)

INORGANIC CHEMISTRY-II

Through this course students will be able to

• appreciate the general trends in the chemistry of p-block elements;
• describe the trends in physical and chemical properties of group 13, 14, 15, 16 elements;
• explain anomalous behavior of boron and carbon;
• describe allotropic forms of carbon;
• know the chemistry of some important compounds of boron, carbon and silicon
• list the important uses of group 13, 14, 15, 16 elements and their compounds

PHYSICAL CHEMISTRY-I

Through this course students will be able to

• interpret the real gases, the student will be able to solve the problems.
• describe the ideal and real gases.
• use the Van Der Waals gas equation.
- use the real gas and Van Der Waals isoterms.
- describe the critical state, adapts critical state equation to the problems.
- interpret some properties of liquids and solids, and solve the problems.
- describe the condensed phases.
- express and use the vapour pressure.
- Interpret the phase equilibrium in simple systems and solve questions related to them.
- express the stability of the phases in the pure substance.
- interpret the pressure dependence of T-M curve.

**MATHEMATICS**

**PAPER –I:**

**CALCULUS AND DIFFERENTIAL EQUATIONS**

**PAPER –II: CALCULUS**

Through this course students will be able to

- Understand the fundamental concepts of differential calculus.
- Apply differentiation techniques to functions.
- Solve first-order ODEs using various methods (separation of variables, integrating factors, etc.).
- Develop a comprehensive understanding of matrices and linear algebra.

**Course 4, 5, 6 Stream 2(BOTANY)**

**PAPER –II A: CELL BIOLOGY**

Through this course students will be able to

- understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles
- understand how these cellular components are used to generate and utilize energy in cells
- understand the cellular components underlying mitotic cell division.
- apply their knowledge of cell biology to selected examples of changes or losses in cell function.

**PAPER –II B: GENETICS**

Through this course students will be able to

- understand DNA structure, its replication, DNA–protein interaction
• understand Cell Division, Genetic Inheritance, laws of segregation and independent assortment
• understand Structure of gene and transfer of genetic information;
• understand Genetic Variations, DNA, damage and repair

Course 4, 5, 6, Stream 2(ZOOLOGY)

ZOO –II A: ECOLOGY

Through this course students will be able to

• understand definition, subdivisions and scope of ecology
• elaborate ecosystem and its components
• define nutrients and understand biogeochemical cycles and concept of limiting factors.
• understand ecological adaptations such as Morphological, physiological and behavioural adaptations in animals in different habitats.
• understand and explain Population, its characteristics and regulations of population.
• understand Natural Resources and differentiate between Renewable and nonrenewable natural resources and their conservations.
• understand environmental issues, their causes, impact and control of environmental pollution.

ZOO –II B: BIODIVERSITY-II (ARTHROPODA TO HEMICHORDATA)

Through this course students will be able to

• create appreciation on diversity of life on earth
• understand different levels of biological diversity
• familiarize taxa level identification of animals
• learn biodiversity estimation techniques
• create interest for conservation of biodiversity
COURSE EPC II UNDERSTANDING THE SELF

Through this course students will be able to

- Discover and develop open-mindedness, the attitude of a self-motivated learner, having self-knowledge and self-restraint.
- Develop the capacity for sensitivity, sound communication skills and ways to establish peace and harmony.
- Develop the capacity to facilitate personal growth and social skills in their own students.

COURSE 7 DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION

Through this course students will be able to

- Know the nature and extent of Drug Abuse in India and Punjab.
- Recognize the various consequences of Drug Abuse

SEMESTER III

COURSE 1 UNDERSTANDING EDUCATION AND ITS PERSPECTIVES

Through this course students will be able to

- Develop an insight into the fundamentals of Education.
- Understand the interdisciplinary nature of Education.
- Reflect upon the educational thoughts of Indian and Western thinkers.
- Critically examine the issues and concerns of education in the socio-cultural contexts of India.
- Understand the role of different agencies in promoting socialization.
- Correlate School with Societal needs.

COURSE 2 GENDER, SCHOOL AND SOCIETY

Through this course students will be able to

- Develop an insight into the different gender issues and concerns inthe
society.

- Understand various Constitutional provisions related to gender.
- Identify various efforts taken by different agencies to tackle gender issues in India.
- Perform his/her role for minimizing gender inequalities in the society.

**COURSE 3 ENGLISH**

Through this course students will be able to

- Analyse the knowledge of grammar and vocabulary
- Consider and comprehend the unseen passages and learn the art of various types of writing
- Develop skills to evolve ideas into expressions
- Apply the learnt skills in constructive writing

**COURSE 4 PUNJABI**

Through this course students will be able to

- Provide an introduction for language skills and enhance literary skills too.
- Analyse the Punjabi literature related plays and biography of eminent writers

Course 5, 6, 7 Stream 1 (PHYSICS)

**PAPER A- STATISTICAL PHYSICS & THERMODYNAMICS**

- To enable the students to understand Basic ideas of Statistical Physics
- To enable the students to understand Comparison of M.B, B.E and F.D statistics
- To enable the students to understand entropy
- To enable the students to understand Maxwell Thermodynamics relations

**PAPER B- OPTICS AND LASERS**

- To enable the students to understand Interference of Light
- To enable the students to understand Diffraction
- To enable the students to understand Polarization
- To enable the students to understand Laser Fundamentals
Course 5, 6, 7 Stream 1&2 (CHEMISTRY)

ORGANIC CHEMISTRY-II

Through this course students will be able to

- To enable the students to understand  Stereochemistry Organic Compounds
- To enable the students to understand  Isomerism
- To enable the students to understand  Alcohols
- To enable the students to understand  Phenols
- To enable the students to understand  Preparation of Aldehydes and Ketones
- To enable the students to understand  Properties of Aldehydes and Ketones and Coupling reaction using Transition metal/metal complexes (formation of C-C bonds)

PHYSICAL CHEMISTRY-II

- Through this course students will be able to
- To enable the students to understand First Law of Thermodynamics
- To enable the students to understand Kirchhoff’s equation.
- To enable the students to understand Second Law of Thermodynamics and Third Law of Thermodynamics
- To enable the students to understand Concept of Entropy, Introduction to Phases

MATHEMATICS PAPER–I: - Analysis

- Understand the concepts of sequences, series, and limits, and apply them to various problems.
- Learn the criteria and tests for convergence and divergence of sequences and series, and evaluate them using different methods.
- Comprehend the notion of riemann integrability, and determine whether a function is integrable or not.
- Master the techniques of improper integrals, and use them to calculate beta and gamma functions

Paper 2: - ANALYTICAL GEOMETRY
Through this course students will be able to

- Recognize about Parabola, Ellipse and hyperbola along with their properties.
- Understand about Transformation of axes, Rotation of axes in two dimension and three dimensions
- Apply the concepts of transformation of axes, shifting of origin, and rotation of axes in two and three dimensions to solve problems involving coordinate geometry.
- Explore the features of sphere, such as sections, intersections, tangents, power, and radical planes, and use them to describe and manipulate spherical objects and surfaces.

Course 5, 6, 7 Stream 2(BOTANY)

PAPER III–A: STRUCTURE, DEVELOPMENT AND REPRODUCTION IN FLOWERING PLANTS-I

Through this course students will be able to

- understand structure, development and reproduction in flowering plants with diagram.
- understand root system and draw well labelled diagrams related to vegetative reproduction in plants.
- understand and draw well labelled diagrams related to structure and function of anther and pistil in plants.
- understand and draw well labelled diagrams related to double fertilization in plants.

PAPER –III B: STRUCTURE, DEVELOPMENT AND REPRODUCTION IN FLOWERING PLANTS-II

Through this course students will be able to

- understand the Root System, differentiation of primary and secondary tissues and their roles;
- understand structural modification for storage, respiration, reproduction and for interaction with microbes.
- understand Vegetative Reproduction and various methods of vegetative propagation.
- know about Flower structure, development and varieties of flower and its functions
- understand the structure of anther and pistil
• know about types of pollination
• understand the concept of double fertilization:
• know about the significance of Seed

Course 5, 6, 7 Stream 2(ZOOCLOGY)
ZOO –III A: EVOLUTION

Through this course students will be able to

• To enable the students to understand about the concept of Evolution.
• To enable the students to understand about the origin of life and concept of micro, macro and mega evolution.
• To enable the students to get a thorough knowledge about fossils, evolutionary rate and evolution of man.
• To enable the students to understand the concept of migration in birds and pisces.

ZOO –II B: BIODIVERSITY-III (CHORDATES)

• Through this course students will be able to
• To enable the students to understand about urochordates and cephalochordates
• To enable the students to understand about cyclostomata and pisces and also to draw the well labelled diagrams of type animals
• To enable the students to understand about the characteristics of amphibians and reptiles.
• To enable the students to understand about the type animals of aves and mammals and also to draw the diagrams of their systems.

SEMESTER IV

COURSE 1 LANGUAGE PROFICIENCY AND COMMUNICATION SKILLS

Through this course students will be able to

• Understand the concept and process of communication.
• Enhance his/her skills of listening, speaking, reading and writing.
• Develop the required communication skills necessary for classroom interaction.
• Develop a thorough understanding of linguistics and paralinguistics.

COURSE 2 ENGLISH

Through this course students will be able to

• Understand the art of reading and comprehending stories and prose
• develop the skill of advanced grammar and composition
• inculcate humane values and ethics through the given poem
• engage in the praxis of applying those theoretical and philosophical underpinnings for the analysis of a particular poem
• learn grammar as a rule governed behaviour

COURSE 3 PUNJABI

Through this course students will be able to

• Speculate and acquire the basic knowledge of Punjabi literature, grammar, and composition.
• Analyse the difference between prose and poetry.
• Trace and learn the skill of writing in Punjabi.
• Deduce literal comprehension of the texts.

Course 4, 5, 6 Stream 1(PHYSICS)

PAPER A- QUANTUM MECHANICS

Through this course students will be able to

• understand the failure of classical physics at the microscopic level
• understand Basic non-relativistic Quantum Mechanics
• describe Matrix representation of Quantum Mechanics
• Apply principles of Quantum Mechanics to calculate observables for given wave functions
• Solve Schrodinger equation for simple systems like simple harmonic oscillator, hydrogen atom, particle in a box, etc.

PAPER B- ATOMIC AND MOLECULAR SPECTRA
Through this course students will be able to

- describe the atomic spectra, Types of spectra, Light sources, Spectral analysis,
- describe Bohr's Theory
- describe the atomic spectra of one, two and many valance electron atoms.
- explain the change in behavior of atoms in external applied electric and magnetic field.
- explain rotational, vibrational, electronic and Raman spectra of molecules.
- Describe electron spin and nuclear magnetic resonance spectroscopy and their applications.
- explain X-ray spectra, Mosley law, Absorption spectra and Auger effect
- Describe exclusion principle, shells, subshells in atoms, atomic spectra (Helium).
- Elaborate spectra of alkaline earth atoms, LS coupling, selection rules, Regularities in atomic spectra.

Course 4, 5, 6 Stream 1&2(CHEMISTRY)

INORGANIC CHEMISTRY-III

Through this course students will be able to

- know about Coordination Compounds and its Nomenclature of coordination compounds,
- explain Werner’s coordination theory and its experimental verification, effective atomic number, polydentate, chelating ligands and chelation, factors affecting stability of chelates
- describe Magnetic properties and colour of coordination compounds.
- Explain Physical properties of a solvent and their role in chemical reaction.
- describe types of solvents and their general characteristics,
- Elaborate Oxidation and Reduction Oxidation-reduction as electron transfer reaction, oxidation number, redox reactions,
- explain methods of separation of lanthanide from each other, Electronic absorption and uses of lanthanides
- explain essential and trace elements in biological processes, essential bulk elements and their role in biological processes.
- know about importance of trace elements in biology.

ORGANIC CHEMISTRY-III

Through this course students will be able to

- explain Carboxylic Acids, its nomenclature, Structure and bonding, physical properties,
acidity of carboxylic acids, effects of substituents on acid strength.

- explain Structure and nomenclature of acid chlorides, esters, amides and acid anhydrides, Relative stability & reactivity of acyl derivatives.
- describe nomenclature of ethers and methods of their formation, physical properties.
- explain heterocyclic Compounds Introduction: Molecular orbital picture and aromatic characteristics of pyrrole, furan, thiophene and pyridine.
- describe preparation of nitroalkanes and nitroarenes
- explain organomagnesium compounds
- explain organozinc and organo copper Compounds its nomenclature, structural features, methods of formation and chemical reactions.

Course 4, 5, 6 Stream 1 MATHEMATICS

PAPER–I: STATICS AND VECTOR CALCULUS
PAPER–II: SOLID GEOMETRY

Through this course students will be able to

- Apply numerical methods to obtain approximate solutions to mathematical problems
- Demonstrate precise and proficient use of complex functions continuity, differentiability
- Know about parallelogram law, triangle law, polygon law, Lami’s Theorem, $(\vec{a} \cdot \vec{b})$ theorem, Vector differentiation, Vector identity and Vector integration
- Understand the concept of Cylinder as surface generated by a line moving parallel to a fixed line and through fixed curve.
- Understand about the concept of Cone with a vertex at the origin as the graph of homogeneous equation of second degree in $x, y, z$

Course 4, 5, 6 Stream 2(BOTANY)

PAPER IV–A: DIVERSITY OF SEED PLANTS AND THEIR SYSTEMATICS-I

Through this course students will be able to

- understand structure, development and reproduction in flowering plants with diagram.
- understand root system and draw well labelled diagrams related to vegetative reproduction in plants.
- understand and draw well labelled diagrams related to structure and function of anther and
pistil in plants.

- understand and draw well labelled diagrams related to double fertilization in plants.

**PAPER –IV B: DIVERSITY OF SEED PLANTS AND THEIR SYSTEMATICS-II**

Through this course students will be able to

- explain angiosperm taxonomy, its aims and fundamental components
- explain Botanical nomenclature
- explain major contribution of cytology
- describe diversity of flowering plants as illustrated by members of the families
- explain diversity of flowering plants as illustrated by members of the families Apocynaceae, Asclepiadaceae, Solanaceae, Lamiaceae, Chenopodiaceae, Euphorbiaceae, Liliaceae, Orchidaceae and Poaceae.

**Course 4, 5, 6 Stream 2(ZOOLOGY)**

**ZOO –IV A: BIOCHEMISTRY**

Through this course students will be able to

- To enable the students to understand biochemistry and biotechnology and draw well labelled diagrams related to plant biochemistry and plant biotechnology
- To enable the students to understand plant enzymology and draw well labelled diagrams related to plant enzymology.
- To enable the students to understand plant respiration and draw well labelled diagram related to plant respiration
- To enable the students to understand nitrogen and lipid metabolism.
- To enable the students to understand genetic engineering in plants and draw well labelled diagrams related to genetic engineering.
- To enable the students to understand biotechnology of plants and draw well labelled diagrams related to plant biotechnology.

**ZOO –IV B: ANIMAL PHYSIOLOGY**

Through this course students will be able to

- know about digestion of dietary constituents
• know about various Respiration processes and transport of O2 and CO2, Haldane effect and control of breathing.

• understand Heart, its origin and regulation of heart beat, cardiac cycle, electrocardiogram, cardiac output, Blood pressure and micro-circulation.

• understand Blood, Composition and functions of blood and lymph.

• explain excretion: Urine formation and osmoregulation.

• understand Muscles: Ultrastructure, chemical and physical basis of skeletal muscle contraction.

• understand and elaborate Structure and physiology of thyroid, parathyroid, adrenal, hypothalamus, pituitary, pancreas and gonads.

COURSE EPC III - DRAMA AND ART IN EDUCATION

Through this course students will be able to

• Develop imagination and sense of appreciation of art and interest in art.
• Develop aesthetic sense.
• Prepare effective teaching aids.
• Gain basic knowledge about colour scheme.
• Use drama processes to examine their present and to generate new knowledge
• Understand the world and themselves in it.

COURSE 7 ENVIRONMENTAL STUDIES

Through this course students will be able to

• Discuss on objective and Need of Environment Education.
• Reflect Importance of environment education in School Curriculum.
• Appreciate the Role of Various media in environment education.
• Analyse Environment crisis.
• Organize different Activities related to Environment Education
• Perform activities for awareness of Environment Education.
• Utilize the acquired knowledge to maintain the environmentally friendly philosophy with sustainability of various environmental resources. Also, to
create awareness amongst others to keep the environment safe and clean.

SEMESTER–V

Course 1 UNDERSTANDING THE LEARNER

Through this course students will be able to

- Understand the growth and development of the learner and its importance in the learning process
- Understand characteristics of adolescents with reference to socio-cultural factors Reflect upon various developmental theories.
- Analyse the different learning approaches and their educational implications.
- Understand the role of teacher in holistic development of learner and learning.
- Understand the importance of individual differences in normal classroom.
- Understand the psychology of learners with special needs and teach them accordingly.

Course 2 EDUCATIONAL TECHNOLOGY AND ICT FOR TEACHING AND LEARNING

Through this course students will be able to

- Understand the concept and scope of Educational Technology.
- Reflect upon the evolution of Education Technology.
- Explore the modern innovations in teaching and learning process.
- Analyse the anatomy of teaching and learning.
- Reflect upon various phases of teaching.
- Become an ICT skilled teacher.

Course 3 INCLUSIVE EDUCATION

- Understand the concept and nature of inclusive education.
- Develop awareness towards diverse needs of special students.
- Reflect upon various policies and programmes associated with Inclusive education in Indian Context.
- Develop an attitude to foster inclusive education

PAPER–A CONDENSED MATTER PHYSICS (THEORY)
• To understand the basic concepts of crystal structure, symmetry operations, Bravais lattices, Miller indices, and crystal diffraction.
• To apply the Bragg’s law, Laue equations, reciprocal lattice, Brillouin zones, structure factor, and atomic form factor to analyze the experimental methods for crystal structure studies.
• To learn the theory of lattice vibrations, phonons, and their interactions with photons.
• To compare the Einstein and Debye models of specific heat and their limitations.

PHYSICS PAPER–B ELECTRONICS (THEORY)

• To understand the basic concepts and principles of solid state physics, such as free electrons, Fermi gas, band theory, and semiconductors.
• To apply the knowledge of solid state physics to analyze and design electronic devices and circuits, such as diodes, transistors, amplifiers, oscillators, and power converters.
• To develop the skills of circuit simulation, experimental measurement, and data analysis using various tools and techniques.
• To appreciate the role and importance of electronics in various fields of science, engineering, and technology.

PAPER–VI, VII & VIII, STREAM–1 PHYSICS (PRACTICAL)

• To develop the skills of performing experiments related to the topics covered in the theory papers of Physics.
• To understand the principles and applications of various electronic devices such as diodes, transistors, amplifiers, filters, and logic gates.
• To analyze the experimental data and draw appropriate conclusions.
• To maintain a record of the experiments performed and the observations made.

PAPER–VI, VII & VIII, STREAM–1 CHEMISTRY (INORGANIC CHEMISTRY–IV) (THEORY)

• To understand the limitations of valence bond theory and the basic concepts of crystal field theory for transition metal complexes.
• To learn about the magnetic properties of transition metal complexes and how they can be used to characterize them.
• To study the thermodynamic and kinetic aspects of metal complexes and the factors affecting their stability and reactivity.
• To explore the chemistry of coordination compounds of lanthanides and actinides and their applications.
PAPER–VI, VII & VIII, STREAM–1 CHEMISTRY (PHYSICAL CHEMISTRY–III) (THEORY)

- To understand the concepts and principles of electrochemistry and its applications in various fields.
- To learn the fundamentals of chemical kinetics and the factors affecting the rate of chemical reactions.
- To acquire the knowledge of thermodynamics and its laws, and their relevance to chemical systems.
- To comprehend the basic concepts of surface chemistry and colloids, and their role in various phenomena.

PAPER–VI, VII & VIII, STREAM–1 CHEMISTRY (PRACTICAL)

- To learn the techniques of synthesis and analysis of various inorganic complexes.
- To perform conductometric, pH metric, and refractometric experiments and analyze the data obtained.
- To determine the molecular weight, distribution coefficient, and composition of mixtures using different methods.
- To develop the skills of observation, recording, and reporting of experimental results.

PAPER–VI, VII & VIII, STREAM–1 MATHEMATICS PAPER–I: DYNAMICS

- To introduce the concepts and principles of dynamics, such as rectilinear motion, curvilinear motion, simple harmonic motion, work, power, and energy.
- To develop the skills of applying mathematical methods and techniques to solve problems related to dynamics, such as motion of particles, projectiles, oscillations, and conservation of energy.
- To enhance the understanding of the applications and relevance of dynamics in various fields of science and engineering, such as mechanics, astronomy, and physics.

PAPER–VI, VII & VIII, STREAM–1 MATHEMATICS PAPER–II: NUMBER THEORY

- To introduce the basic concepts and properties of divisibility, primes, and congruences in integers.
- To explore various number-theoretic functions and their applications to cryptography and coding theory.
- To develop the skills of mathematical reasoning, proof techniques, and problem solving in the context of number theory.
• To appreciate the beauty and elegance of number theory and its connections with other branches of mathematics.

PAPER–VI, VII & VIII, STREAM–2 CHEMISTRY (INORGANIC CHEMISTRY–IV) (THEORY)

• To understand the limitations of valence bond theory and the basic concepts of crystal field theory for transition metal complexes.
• To learn how to determine the magnetic properties of transition metal complexes and their correlation with the electronic configuration and spin state of the metal ion.
• To study the thermodynamic and kinetic aspects of metal complexes, such as their stability, formation, and substitution reactions.
• To explore the chemistry of lanthanides and actinides, their electronic structure, oxidation states, magnetic behaviour, and separation methods.

PAPER–VI, VII & VIII, STREAM–1 CHEMISTRY (PHYSICAL CHEMISTRY–III) (THEORY)

• Understand concepts such as conduction, conductance, and electrolyte dissociation.
• Learn about different types of electrochemical cells and electrode potentials.

• AppGrasp the basics of reaction rates, rate laws, and order of reactions.
• Analyze factors affecting reaction rates (concentration, temperature, catalysts).
• Learn about collision theory and transition state theory.

• Apply the Nernst equation and thermodynamics of cell reactions

PAPER–VI, VII & VIII, STREAM–1 CHEMISTRY (PRACTICAL)

• To synthesize and analyze various inorganic complexes and compounds using different techniques and methods.
• To perform conductometric and pH metric titrations to determine the end points, composition, and dissociation constants of acids and bases.
• To determine the molecular weight of organic compounds using Rast’s method and the refractive index of liquids using Abbe refractometer.
• To study the phase equilibria of a binary system and the distribution coefficient of a solute between two immiscible solvents.

PAPER–VI, VII & VIII, STREAM–2 BOTANY PAPER–VA: PLANT PHYSIOLOGY (THEORY)
- Understand plant-water relations.
- Analyze mineral nutrition and its effects.
- Explore transport of organic substances in plants.

BOTANY PAPER–VB: BIOCHEMISTRY AND BIOTECHNOLOGY (THEORY)

- To introduce the students to the basics of enzymology, such as the discovery, nomenclature, characteristics, regulation, and mechanism of action of enzymes.
- To explain the process of respiration in living organisms, including the role of ATP, aerobic and anaerobic respiration, Kreb’s cycle, electron transport, redox potential, oxidative phosphorylation, and pentose phosphate pathway.
- To describe the nitrogen and lipid metabolism in plants, covering the biology of nitrogen fixation, nitrate reductase, ammonium assimilation, structure and function of lipids, fatty acid biosynthesis, β-oxidation, storage and mobilization of fatty acids.
- To provide an overview of genetic engineering and biotechnology, highlighting the tools and techniques of recombinant DNA technology, cloning vectors, genomic and cDNA libraries, transposable elements, gene mapping, plant tissue culture, cellular totipotency, differentiation and morphogenesis, Agrobacterium, gene delivery and marker genes, and achievements in crop biotechnology.

PAPER–VI, VII & VIII, STREAM–2 BOTANY BOTANY PRACTICALS – V (BASED ON PAPERS–VA AND VB)

- To understand the structure and function of plant cells and their organelles.
- To learn the techniques of protein estimation, enzyme assay, and amino acid separation.
- To study the effects of various factors on membrane permeability, osmosis, plasmolysis, and imbibition.
- To investigate the role of plant hormones in growth and development.
- To demonstrate the processes of photosynthesis, transpiration, and ascent of sap.
- To explore the methods of micropropagation and anther culture.

PAPER–VI, VII & VIII, STREAM–2 ZOOLOGY ZOO–VA: DEVELOPMENTAL BIOLOGY (THEORY)

- To understand the basic concepts and principles of developmental biology, such as gametogenesis, fertilization, cleavage, gastrulation, determination, differentiation, tissue interactions, organogenesis, metamorphosis, and regeneration.
- To study the embryonic development of various animal models, such as Hardmania, frog, chick, and rabbit, and compare their similarities and differences.
• To learn about the formation and function of foetal membranes and placenta in mammals.
• To appreciate the applications and implications of developmental biology in biotechnology, medicine, and conservation

SEMESTER–V PAPER–VI, VII & VIII, STREAM–2 ZOOLOGY ZOO–V B: GENETICS (THEORY)

• To understand the basic concepts and principles of genetics, such as Mendelian ratios, non-allelic gene interactions, multiple alleles, multiple factors, linkage, crossing over, and recombination.
• To learn the structure and function of nucleic acids, such as DNA and RNA, and how they are involved in replication, transcription, and expression of genes.
• To explore the genetic code and its properties, such as codon assignment, wobble hypothesis, split and overlapping genes
• To study the types and causes of mutations, and their effects on phenotypes and metabolic pathways, such as inborn errors of metabolism and carcinogenesis.
• To comprehend the regulation of gene expression in prokaryotes and eukaryotes, and the role of operons and other mechanisms
• To examine the phenomenon of extranuclear inheritance, and how chloroplasts and kappa particles are inherited in plants and protozoans

PAPER–VI, VII & VIII, STREAM–2 ZOOLOGY PRACTICAL–V (RELATED TO ZOO–V A AND ZOO–V B)

• To demonstrate the principles of Mendelian genetics using models and experiments.
• To observe the variations and inheritance of some traits in plants and animals.
• To calculate the gene frequencies and test the Hardy-Weinberg equilibrium in populations.
• To apply the chi-square test to evaluate the significance of observed data.

EPC–IV DEVELOPING ICT COMPETENCIES

To enable the student teachers to know about computer and its components.

To enable the student teachers to make slide presentation.

Semester - VI

SCHOOL MANAGEMENT

● Understand the concept of School Organization and Management.
● Understand TQM and its application in day to day working of schools.
● Perform different functions of Schools
● Perform as a teacher in an efficient and coordinated manner in a School.

PEACE EDUCATION AND HAPPINESS
● Understand the concept and importance of Peace.
● Understand Various Initiatives taken for building Peace in the World.
● Explain the Concept and Need of Peace Education.
● Perform the role in a better way to promote Peace Education.

LIFE LONG EDUCATION
● Explain the concept and need of Life Long Education.
● Understand the functioning of various agencies of adult and continuing education in India and abroad.
● Explain the various trends related to Adult and Continuing Education.
● Understand and contribute to the global perspectives of Life Long Education in future.

HEALTH EDUCATION
● Understand the concept and need of Health and Health Education.
● Feel the importance of balanced diet and Personal Hygiene in their lives.
● Understand role of various agencies in promoting Health Education in rural areas.
● Perform their role as an effective Teacher.

Value Education
● Understand concept and various sources of Values and Value Education.
● Understand the role of various agents of education in promoting value education.
● Promote Value Education by knowing about its various strategies.
● Inculcate values among their students in their future role.

Guidance and Counselling
● Understand the concept and need of guidance and Counselling.
● Know the various agencies of guidance at District, State and National level
● Analyze the relationship between guidance and counselling.
● Become acquainted with the skills and qualities of an effective counsellor.

• To understand the interaction of radiation and charged particles with matter, such as energy loss, stopping power, and annihilation processes.
• To learn the principles and applications of various nuclear radiation detectors, such as gas-filled, scintillation, semiconductor, and Cherenkov detectors.
• To study the types and features of different accelerators, such as linear, cyclic, and colliding beam machines, and their role in particle physics research.

PAPER–V, VI & VII, STREAM–I PHYSICS PAPER–B: NUCLEAR PHYSICS (THEORY)
• To understand the basic properties and structure of the atomic nucleus, such as mass, radius, angular momentum, parity, magnetic and electric moments, and nuclear forces
• To learn the different modes and laws of radioactive decay, such as alpha, beta, and gamma decay, and the concept of neutrino and parity violation.
• To study the various types of nuclear reactions, such as fission, fusion, and spallation, and the conservation laws and Q-values associated with them.
• To explore the applications of nuclear physics in various fields, such as nuclear energy, nuclear medicine, nuclear astrophysics, and nuclear weapons.

PAPER–V, VI & VII, STREAM–I PHYSICS (PRACTICAL)
• To develop the skills of performing experiments in physics and analyzing the data obtained from them.
• To understand the principles and applications of various instruments and devices used in physics experiments.
• To enhance the conceptual understanding of physics concepts through practical activities.
• To foster the scientific attitude and curiosity among the students.

PAPER–V, VI & VII, STREAM–I CHEMISTRY ORGANIC CHEMISTRY–IV (THEORY)
• To understand the principles and applications of various spectroscopic techniques for the identification and characterization of organic compounds.
• To learn the mechanisms and synthetic methods of various organic reactions involving carbonyl compounds, carboxylic acids and their derivatives, amines, and heterocyclic compounds.
• To acquire the skills of designing and performing organic synthesis using different reagents and strategies.
• To develop the ability to analyze and interpret the experimental data and results of organic chemistry experiments.

PAPER–V, VI & VII, STREAM–I CHEMISTRY PHYSICAL CHEMISTRY–IV (THEORY)
• To introduce the basic concepts and principles of quantum mechanics and its applications to atomic and molecular systems.
• To understand the nature and properties of solids and their characterization by X-ray diffraction methods.
• To develop the skills of solving numerical problems based on the topics covered in the syllabus.

PAPER–V, VI & VII, STREAM–1 CHEMISTRY (PRACTICAL)

• To learn the technique of column chromatography and apply it to separate different organic compounds and leaf pigments.
• To synthesize various organic compounds such as p-nitroacetanilide, p-bromoacetanilide, benzilic acid, methyl orange, methyl red, and nitrosalicylic acid using different methods and reagents.
• To adopt green chemistry principles and practices in organic synthesis, such as using eco-friendly reagents, reducing waste, and improving efficiency.
• To develop skills in organic laboratory techniques, such as purification, crystallization, melting point determination, and TLC analysis.

LINEAR ALGEBRA

• To understand the basic concepts of groups, rings, fields, and vector spaces.
• To learn how to use linear transformations, matrices, and isomorphisms to manipulate and analyze vector spaces.
• To apply the rank-nullity theorem and the invariance of dimension to solve problems involving subspaces and quotient spaces.
• To explore the properties and applications of linear operators.

NUMERICAL ANALYSIS

• To provide the numerical methods of solving the non-linear equations, interpolation, differentiation, and integration.
• To improve the student’s skills in numerical methods by using the numerical analysis software and computer facilities.
• To gain experience in the implementation of numerical methods using a computer.
• To trace error in these methods and need to analyze and predict it.
• To understand the principles and applications of various spectroscopic techniques for the identification and characterization of organic compounds.
• To learn the mechanisms and synthetic methods of various organic reactions involving carbonyl compounds, carboxylic acids and their derivatives, amines, and heterocyclic compounds.
• To acquire the skills of designing and performing organic synthesis using different reagents and strategies.
• To develop the ability to analyze and interpret the experimental data and results of organic chemistry experiments.

PAPER–V, VI & VII, STREAM–2 CHEMISTRY PHYSICAL CHEMISTRY–IV (THEORY)

• To introduce the basic concepts and principles of quantum mechanics and its applications to atomic and molecular systems.
• To understand the nature and properties of solids and their characterization by X-ray diffraction methods.
• To develop the skills of solving numerical problems based on the topics covered in the syllabus

PAPER–V, VI & VII, STREAM–2 CHEMISTRY (PRACTICAL)

• To learn the technique of column chromatography and apply it to separate different organic compounds and leaf pigments.
• To synthesize various organic compounds such as p-nitroacetanilide, p-bromoacetanilide, benzilic acid, methyl orange, methyl red, and nitrosalicylic acid using different methods and reagents.
• To adopt green chemistry principles and practices in organic synthesis, such as using eco-friendly reagents, reducing waste, and improving efficiency.
• To develop skills in organic laboratory techniques, such as purification, crystallization, melting point determination, and TLC analysis.

PAPER–V, VI & VII, STREAM–2 BOTANY PAPER–VIA: ECOLOGY (THEORY)

• To understand the basic concepts and principles of ecology, such as plants and environment, community ecology, population ecology, and ecosystem ecology.
• To apply ecological knowledge to analyze and solve environmental problems, such as pollution, biodiversity loss, and climate change.
• To develop skills in observation, experimentation, data analysis, and scientific communication in the field of ecology

**PAPER–V, VI & VII, STREAM–2 BOTANY**

**PAPER–VIB: ECONOMIC BOTANY (THEORY)**

• Understand the economic importance of diverse plant species.
• Identify plants of economic significance through field visits, live specimens, herbarium samples, and digital resources.
• Recognize the importance of various plant parts and their products used in food, fibers, medicines, oils, and other economically valuable applications

**PAPER–V, VI & VII, STREAM–2 BOTANY BOTANY PRACTICALS–VI (BASED ON PAPERS–VIA AND VIB)**

• To understand the concepts and methods of ecological sampling and analysis in grasslands and water bodies.
• To study the adaptations of plants to different environmental conditions such as hydrophytes and xerophytes.
• To examine the structure and composition of various plant tissues and products such as food, fibers and oils.
• To develop the skills of sectioning, staining, microscopy and microchemical tests for plant materials.


• Introduce the students to the field of parasitology and the various terminologies used in it.
• Provide an overview of the pathogenic microbes, viruses, rickettsiae, spirochaetes and bacteria that cause diseases in humans and animals.
• Explain the epidemiology, transmission, symptoms, diagnosis, treatment and prevention of some common infectious diseases caused by protozoa and helminthes.
• Describe the life cycle and control measures of arthropod vectors of human diseases such as malaria, yellow fever, filariasis, plague and typhus


• To understand the basic principles and applications of antigen and antibody interactions, serodiagnostic assays, and vaccines.
To learn the laboratory techniques of colorimetry, microscopy, autoclaving, centrifugation, and spectrophotometry.

To acquire the skills of collection, transportation, and preservation of different clinical samples.

To perform various tests and analyses in the fields of haematology, bacteriology, histopathology, and biochemistry.

PAPER–V, VI & VII, STREAM–2 ZOOLOGY PRACTICAL–VI (RELATED TO (OPTION–I) ZOO–VI A AND ZOO–VI B)

- Demonstrate safety rules and use of equipment in a laboratory setting, such as autoclave, centrifuge, spectrophotometer, etc.
- Perform physico-chemical examination of urine and blood smear preparation and counting.
- Study the parasitic organisms mentioned in the theory syllabus, their identification, pathogenicity and host.
- Estimate blood parameters such as sugar, protein, urea, cholesterol, etc.
- Prepare histological and histochemical sections of tissues and stain them with routine haemotoxylin and eosin.
- Visit a pathology lab and prepare a report.


- To introduce the students to the field of economic entomology, which deals with the study of insects that affect human economy and welfare.
- To familiarize the students with the systematic position, habits, nature of damage, life cycle and control measures of various insect pests of crops and vegetables, such as sugarcane, cotton, paddy and wheat.
- To enable the students to understand the principles and methods of integrated pest management, biological control, chemical control and cultural control of insect pests.
- To develop the students’ skills in identifying, observing and collecting insect specimens and preparing insect collections and reports.

PAPER–V, VI & VII, STREAM–2 ZOOLOGY ZOO–VI B: OPTION–II: ECONOMIC ENTOMOLOGY–II (THEORY)

- To understand the systematic position, disease caused and control of various pests of medical and veterinary importance, such as mosquitoes, sand flies, house flies, horse flies, blow flies, warble flies, fleas, lice, etc.
To study the mouth parts of different insects and their adaptations for feeding habits, such as red cotton bug, cockroach, mosquito, honey bee, butterfly, etc.

To learn about the economic importance of honey bees, silk worms, lac insects, and their products, such as honey, wax, silk, and lac.

To know about the pests of stored grains and their management, such as rice weevil, lesser grain borer, khapra beetle, etc.


To understand the structure and function of the feeding apparatus of different insects by preparing permanent mounts of their mouth parts.

To study the diversity and adaptations of insect larvae and pupae by observing their morphology and identification marks.

To learn about the economic importance of various insect pests that affect crops, stored grains, and human and animal health by examining their external features and damage symptoms.

To develop skills in handling, mounting, and preserving insect specimens for future reference and study.


To understand the history and scope of inland fisheries in India and the world

To learn the morphology, classification, and bionomics of important freshwater fishes of India, especially Punjab, Haryana, and Himachal Pradesh

To gain knowledge about the introduction, role, and impact of exotic fishes in fish culture and native fish fauna

To acquire skills in induced breeding techniques and chemicals used for artificial propagation of fishes

To comprehend the principles and practices of pond culture, including construction, fertilization, maintenance, and weed control


To understand the riverine fisheries of river Sutlej and Beas, and the reservoir fisheries of Gobindsgarh and Pong Dam

To learn about the different culture systems of fish farming, such as conventional, extensive, intensive, monoculture, polyculture, and integration with other livestock
• To study the cold water fisheries of Mhaseer and Trout, and the fish diseases and their control methods
• To explore the fish by-products and the marketing of fish, including preservation techniques.

PAPER–V, VI & VII, STREAM–2 ZOOLOGY PRACTICAL–VI (RELATED TO (OPTION–III) ZOO–VI A AND ZOO–VI B)
• To learn the morphology of different types of fishes and their identification using keys.
• To determine the food and feeding habits of fishes based on their stomach contents and analysis methods.
• To determine the maturity stages of commercial fishes based on their external features.
• To prepare and identify the phytoplankton and zooplankton samples that are the food sources of fishes.
• To identify the aquatic weeds that grow in fish ponds and affect their productivity.

Internship I (4 weeks) FIELD ENGAGEMENT WITH SCHOOL AND PERSPECTIVE PAPERS
• To provide students with an opportunity to observe the teaching of experienced teachers and learn from their practices
• To familiarize students with the types of records maintained in the school and their importance for effective teaching and learning.
• To expose students to the practices of inclusive education and how to cater to the diverse needs of learners.
• To enable students to interact with the principal, teachers, and students of the school and understand their perspectives and challenges.
• To enhance students’ subject knowledge and pedagogical skills by visiting subject-specific laboratories, museums, and places of interest
• To develop students’ sensitivity and awareness towards the educational facilities and issues of rural, urban slum, and border area schools.

SEMESTER–VII

UNDERSTANDING THE LEARNING PROCESS

● Understand the concept of learning.
Know various Learning theories and apply it in day to day life.
Understand various Learning styles and apply it for Classroom learning.
Construct knowledge for Learning
Use various techniques of learning and creativity.
Understand various Cognitive and affective mental processes and learning
Understand the role of a teacher in holistic perspective of learner and learning

FOUNDATIONS OF CURRICULUM DEVELOPMENT

Understand the concept of curriculum and development.
Explain various trends in Curriculum Organization and Development.
Develop a broad perspective on curriculum development.
Explain various types and approaches to curriculum development.
Understand various models and steps in curriculum development.
Understand the different models and patterns of curriculum design.
Design the curriculum.

ASSESSMENT FOR LEARNING

Understand the concept of assessment and its role in teaching-learning process.
Develop the skill of assessing various Cognitive, Affective and Conative domains of Learning.
Develop the tool for assessment.
Develop skills of standardization of an assessment tool.
Understand the different dimensions related to assessment procedures, tools and techniques.
Examine the issues and concerns of assessment and evaluation practices in schools.

POLICY FRAMEWORK AND CONTEMPORARY ISSUES IN INDIAN EDUCATION

Understand the commissions and Policies related to education in India.
Know and respect the Constitution of India.
Understand the various Constitutional provisions associated with Education in India.
Understand the contemporary issues associated with Education in Indian society.
Understand the role of education in addressing inequalities in Indian Society.
Critically appraise various aspects of Education.
Respect human rights.

EDUCATION AND DEVELOPMENT
Understand various expectations of society from education.

Educate for democracy and integration.

Understand the relevance of education in relation to multicultural society.

Educate for sustainable development.

Pedagogy of a School Subject – I (PS-I) and Pedagogy of a School Subject – II (PS-II)

- Describe some important methodologies & techniques of teaching subject.
- Prepare and use appropriate audio-visual teaching aids for effective teaching of school subject.
- Differentiate different types of approaches of pedagogy of a school subject.
- Know the concept of evaluation.
- Understand different types of test.
- Formulate macro lesson plan.
- Comprehend different types of micro teaching skills.

Reading and Reflecting on Texts

- Develop their capacities as readers and thinkers.
- Explain different types of Texts.
- Utilize reading resources and policy documents.
- Enhance their reading competencies.

SEMESTER–VIII

Paper I & II: SCHOOL INTERNSHIP Pedagogy of School Subject – I (PS I) Pedagogy of School Subject – II (PS II)

- Apply theoretical knowledge of pedagogy in real classroom situations.
- Plan, execute, and evaluate lessons based on different teaching and learning models.
- Use teaching-learning materials, methods, and techniques effectively.
- Observe, reflect, and analyze aspects of school functioning.
- Foster professionalism, collaboration, and lifelong learning attitudes.
FIELD ENGAGEMENT WITH COMMUNITY

- To enable student-teachers to understand the socio-cultural and economic background of the community and its impact on education.
- To develop skills of conducting surveys, collecting and analyzing data, and preparing reports.
- To sensitize student-teachers to the issues and problems faced by the community and the role of education in addressing them.
- To foster a sense of social responsibility and civic engagement among student-teachers.

PGDCA (1-year programme)

PROGRAM LEARNING OUTCOMES

- Demonstrate the technical knowhow in field of IT Application.
- Design and develop basic IT Application as per customer requirements.
- Work as a team member and team leader as an when needed.
- Render efficient skills to climb the hierarchy of an organization.
- Exhibit skills for a continuous and lifelong learning.
- Understand and dispatch his Professional and Ethical responsibilities towards self and society at large.

PROGRAM SPECIFIC OUTCOMES

- To train graduate students in basic computer technology concepts and information technology applications.
- To enhance their career opportunities in the software development sector in the state.
- Java being the current programming language taught in the course, it will help students to develop confidence in handling information applications.
- To enable students to decide in choosing the options available if the students wishes to go for further studies
- To expose the students to Open Source technologies so that they become familiar with it and can seek appropriate opportunity in trade and industry.
To give hands on to students while developing real life IT application as part of the study.

COURSE LEARNING OUTCOMES

SEMESTER 1

COURSE 1 FUNDAMENTALS OF COMPUTER & OPERATING SYSTEMS

Through this course students will be able to

- Acquire the basic knowledge of computer and its various applications, Components and Input-output devices.
- Explain about Windows 95 and its various utilities in daily lives.
- Acquaint with various practical skills of how to operate DOS.

COURSE 2 PC COMPUTING (MS OFFICE & DTP)

Through this course students will be able to

- Assess practical knowledge about MS Office, Excel and MS Access.
- Know about all the concepts regarding Desktop Publishing.

COURSE 3 INTRODUCTION TO SCRIPTING LANGUAGES AND WEB DESIGNING

Through this course students will be able to

- Know about all the basic concepts of Internet including Web Browser and various Protocols.
- Practically add hyperlinks to their pages, publishing their web pages and adding navigation bars to their pages.

COURSE 4 PROGRAMMING IN C

Through this course students will be able to

- Know about various Data Types, Operators, their precedence, expressions and their evaluation.
- Recognize how to declare arrays, initialize arrays, process arrays and
arrays as arguments to functions.

**SEMESTER II**

**COURSE 1 COMPUTER AIDED TEACHING**

Through this course students will be able to

- Understand the Meaning and Concept Behind Teaching, Learning, Programmed Learning.
- Well verse with usage of computers in daily lives.
- Know how to use computers in making records and register.

**COURSE 2 DATABASE MANAGEMENT SYSTEM, SYSTEM ANALYSIS & DESIGN**

Through this course students will be able to

- Explain about database Management and Relational database systems.
- Assess practical knowledge about ORACLE 8 and PL/SQL.