completion of a course. They are clearly specified and communicated. The Course Outcomes are prepared by the Course Coordinator in consultation with concerned faculty members teaching the same course. The subject coordinator of the university will verify it. Finally, they are discussed in the concerned department's BOS meeting course-wise and approved.

1. DEPARTMENT OF ENGLISH

LINKS FOR ENGLISH SYLLABUS OF DIFFERENT SYLLABUS

- 1. https://www.clujammu.in/syllabus/syllabus.php
- 2. https://www.clujammu.in/syllabus/syllabus/1ENGTCCC01.pdf
- 3. https://www.clujammu.in/syllabus/syllabus/1ENGTCCC01.pdf

4. https://www.clujammu.in/syllabus/syllabus/3ENGSE0202.pdf

5. https://www.clujammu.in/syllabus/syllabus/1ENGTCCC02.pdf

6. https://www.clujammu.in/syllabus/syllabus/4ENGTC0502.pdf

7. https://www.clujammu.in/syllabus/syllabus/4ENGTC0602.pdf

Department offer courses in

- BA (General)
- BSc (General)
- BBA
- BCA
- BSC (Physics Hons)
- BSC. (Math Hons)
- BA. Eng. Hons
- MSC Mathematics

PROGRAMME OUTCOMES

BA (GEN. ENGLISH)

The Program aims at enhancing the skills of reading, writing, speaking and listening. It encourages recognition and awareness of different genres like prose, fiction, drama, short story. The aim is to give composite view of multiculturalism.

BA/BSC/BCA/BSC. PHYSICS HONS/BSC.MATHS HONS/BBA (COMMUNICATION ENGLISH)

The purpose of this course is to introduce students to the theory, fundamental and tools of communication and to develop in them the vital communication skill which should be integral to personal, social, and professional interaction. It focuses on various dimensions of communication skills, the language of communication, various speaking skills such as personal communication,

interaction and communication in professional situations such as interviews, group discussions and office environment.

BBA (Media and communication skills, writing skills and applied grammar)

It focuses on the various aspects of mass communication about various challenges on a global level. It also enhances the various aspects of Indian journalism and gives knowledge about advertisement. It also focuses on various components of grammar and writing skills in business letters and reports.

BA ENG HONS

This Program focuses on various aspects of English literature, literary terms, recognition and awareness of various genres like a short story, poetry, drama, fiction. It also gives a composite view of British literature of various eras, Indian writings in English, European classical literature, Indian classical literature, American literature, literature of Diaspora etc.

MSC MATH (PHONETICS AND SPOKEN ENGLISH)- OPEN ELECTIVE COURSE)

It enhances the students' ability to understand the mechanism of speech, to produce English sounds correctly and to pronounce English with appropriate stress and intonation.

COURSE OUTCOMES

- The course aim at enhancing the skills of reading, writing, speaking and listening. It encourages recognition and awareness of different geners like prose, fiction, drama, short story.
- The aim is to give a composite view of multiculturalism. The purpose of this course is to introduce students to the theory, fundamentals and tools of communication and to develop in them the vital communication skill which should be integral to personal, social, and professional interaction. It focuses on various dimensions of communication skills, the language of communication, various speaking skills such as personal communication, social interaction and communication in professional situations such as interviews, group discussions and office environments. It focuses on the various aspects of mass communication about various challenges on global level. It also enhances the various aspects of Indian journalism and giving the knowledge about advertisement.
- It also focuses on various components of grammar and writing skill in business letters and reports.
- It focuses on various aspects of English literature, literary terms, recognition and awareness of various geners like short story, poetry, drama, fiction. It also gives a composite view of British literature of various eras, Indian writings in English, European classical literature, Indian classical literature, American literature, literature of Diaspora etc. It enhances in the students the ability to understand the mechanism of speech, to produce English sounds correctly and to pronounce English with appropriate stress and intonation.

COURSES OFFERED

SEMESTER-1

1. English anthology and grammar, core course

The course aims at enhancing the skills of reading, writing, speaking and learning. • It encourages recognition and awareness of different genres like the short story, poetry, prose etc. • The aim of the course is to give a composite view of multiculturalism.

2. Communication English

The purpose of this course is to introduce students to the theory, fundamentals and tools of communication and to develop in them vital communication skills which should be integral to personal, social and professional interactions. In the context of rapid globalization and increasing recognition of social and cultural pluralities, the significance of clear and effective communication has substantially enhanced. The present course aims to address some of these aspects through an interactive mode of teaching – learning processes • It focuses on various dimensions of communication skills, Language of communication, various speaking skills such as personal communication, social interaction and communication in professional situations such as interviews, group discussions and office environments, important reading skills as well as writing skills such as report writing, note – taking etc.

3. Functional English, Introduction to Phonetics and Grammar

The purpose of the course is to highlight the methods /techniques /strategies employed in the learning /teaching of English. • Enable students to convert the conceptual understanding of communication into everyday practice. • To introduce students to the basic knowledge of phonetics. • To sensitize students to the nuances of the four basic communication skills – listening. speaking, reading and writing. • To enable the students to tap the resources of ICT in the acquisition of Communication skills.

- Functional English, Practical, Methodology-Functional English Functional English a s a multi – focal discipline – Primary focus on Communication skills--ELT. – LSRW –Listening, Speaking, Reading, Writing Grammar. – Phonetics – Introduction to speech sounds. –Presentations (PPT) / Debates / Extempore
- 5. English Literature, Eng Lit-1,

The purpose of this course is to introduce students to the theory, fundamentals and themes of caste, class, gender, race, war and globalization, and how these affect the individual. This paper aims at enabling the students to develop the skills of textual analysis since the course comprises poems, fictional writing and essays of different types and styles. It will help students to develop a better understanding and comprehension of how similar issues are tackled by writers from different backgrounds and milieus.

6. Media and Communication, Generic,

SEMESTER -2

1. English Anthology and Grammar, Core Course

The course aims at enhancing the skills of reading, writing, speaking and learning. • It encourages recognition and awareness of different genres like the short story, poetry, prose etc. The aim of the course is to give a composite view of multiculturalism.

2. English Literature -2,

The purpose of this course is to offer students a view of literary practices across many Indian languages, over several centuries. Cultural diversity in India exists through a living mixture of continuities and transmutations; how, for instance, medieval Sufi or Bhakti poetry is found amidst the literatures of contemporary India. Dalit, tribal and women's voices are richly represented in this collection, as are themes of caste, community, gender and composite culture. It aims to overcome the limitations of studying the literature of a single language or literary tradition by introducing the student to comparative readings, and to rectify our privileging of written literature by including some examples of oral traditions.

3. Functional English, Phonetics and Grammar-2

To enable the students to handle the target language effectively in an internationally acceptable manner with special emphasis on the exact production of speech sounds. • Identification of distinctive English sounds, its production and the varied phonetic symbols. • An exposure to different world accents in English.

4. Functional English, Practical, Applied Phonetics

Practice of word stress • Practice of accent and rhythm • Practice of intonation.

5. Communication English

The purpose of this course is to introduce students to the theory, fundamentals and tools of communication and to develop in them vital communication skills which should be integral to personal, social and professional interactions. In the context of rapid globalization and increasing recognition of social and cultural pluralities, the significance of clear and effective communication has substantially enhanced. The present course aims to address some of these aspects through an interactive mode of teaching – learning processes • It focuses on various dimensions of communication skills, Language of communication, various speaking skills such as personal communication, social interaction and communication in professional situations such as interviews, group discussions and office environments, important reading skills as well as writing skills such as report writing, note – taking etc.

6. Writing Skills and Applied Grammar, Generic,

7. Phonetics and Spoken English, Open Elective Course

SEMESTER-3

1. English Anthology and Grammar,

The course aims at enhancing the various skills of comprehension- Reading, Writing, Speaking and Learning. • It encourages recognition and awareness of genres like drama and novel.

2. English Literature, Eng. Lit-3,

The objective of this course is to introduce students to the historical background and development of British literature. It introduces the students to two notable authors of Elizabethan and Victorian era of English Literature and their popularized form of writing i.e. Drama and Novel respectively.

3. English Literature, Skill, Creative Writing,

- 4. Functional English, Conversational and Ability Grammar, Core Course
- 5. Functional English, Practical, Writing Skills
- 6. Functional English, Skill, Creative Writing

SEMESTER-4

- English Anthology and Grammar, Core Course The course aims at enhancing the various skills of comprehension- Reading, Writing, Speaking and Learning.
 It encourages recognition and awareness of genres like drama and novel.
- 2. English Literature -4, Core Course
- 3. English Literature, Skill, English Language Skill
- 4. Functional English, Television and Radio Anchoring, Core Course
- 5. Functional English, Practical, Television and Radio Anchoring
- 6. Functional English, Skill, English Language Skill

SEMESTER-5

- 1. English Literature, Skill, Grammar Skills
- 2. English Literature, DSE, Reading and Listening Skills.
- 3. English Literature, Generic, Creative Writing
- 4. Functional English, Skill, Grammar Skills,
- 5. Functional English, DSE, Reading And Listening Skills,
- 6. Functional English, Generic, Creative Writing,

SEMESTER-6

- 1. Eng. Lit, Skill, Critical Appreciation,
- 2. Eng. Lit, DSE, (Women Writers in India),
- 3. Eng. Lit, Generic, Indian Writing in English,
- 4. Fun Eng., Skill, Journalism,
- 5. Fun Eng., DSE, Personality Development,
- 6. Fun.Eng, Generic, Communication English,

2. DEPARTMENT OF ECONOMICS

LINK FOR THE SYLLABUS

SEM1	. https://www.clujammu.in/syllabus/syllabus/1ECOTC0101.pdf
SEM2 .	https://www.clujammu.in/syllabus/syllabus/1ECOTC0201.pdf
SEM3	https://www.clujammu.in/syllabus/syllabus/1ECOTC0301.pdf
SEM 3	https://www.clujammu.in/syllabus/syllabus/1ECOSE0301.pdf
SEM4	https://www.clujammu.in/syllabus/syllabus/1ECOTC0401.pdf
SEM4	https://www.clujammu.in/syllabus/syllabus/1ECOSE0401.pdf
SEM 5	https://www.clujammu.in/syllabus/syllabus/1ECODE0501.pdf
SEM5	https://www.clujammu.in/syllabus/syllabus/1ECODE0502.pdf
SEM5	https://www.clujammu.in/syllabus/syllabus/1ECODE0503.pdf
SEM 5	https://www.clujammu.in/syllabus/syllabus/1ECOSE0501.pdf
SEM 5	https://www.clujammu.in/syllabus/syllabus/1ECOSE0502.pdf
SEM 6	https://www.clujammu.in/syllabus/syllabus/1ECODE0601.pdf
Sem 6	https://www.clujammu.in/syllabus/syllabus/1ECODE0602.pdf
Sem 6	https://www.clujammu.in/syllabus/syllabus/1ECODE0603.pdf
Sem6	https://www.clujammu.in/syllabus/syllabus/1ECOSE0601.pdf
Sem6	https://www.clujammu.in/syllabus/syllabus/1ECOSE0602.pdf

PROGRAM OUTCOMES

SKILL COURSES

- Financial Economics will make students knowledgeable about financial aspects of economy.
- Data Analysis course will train them to calculate by using few statistical tools
- Course on stock market provides the students basic knowledge of stock market operations
- Flagship programs of India will familiarize the students with different rural development schemes in India.

GENERIC COURSES

• These courses will make students aware of various components of Indian economy and basic theoretical underlying in the field of Micro Economics and Macro Economics

COURSE OUTCOMES

PRINCIPLES OF MICRO ECONOMICS-I – SEM IST

• This core course intends to explore the students to the basic principles in micro economic theory. As a foundation course, the aim of this paper is to make the students understand the behaviour of an economic agent a consumer, a producer or a factor of production and the analysis is generally static and in partial equilibrium framework. Micro Economics course will make students familiar with different market structures, factor pricing, behaviour of an economic agent (consumer, producer or a factor of production).

PRINCIPLES OF MICRO ECONOMICS-II - SEM 2nd

• This is a sequel of Micro Economics- I covered in first semester. This course makes students familiar with different market structures, factor pricing, international trade and environmental economics.

PRINCIPLES OF MACRO ECONOMICS-I- SEM 3rd

• This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the functioning of the economy as a whole, including how the economy's total output of goods and services and employment of resources is determined and what causes these totals to fluctuate. This paper has been designed to make the undergraduate students aware of the basic theoretical framework underlying the field of macroeconomics. Macro Economics course deals with functioning of economy as a whole and this course will make students aware of basic theoretical framework underlying field of macroeconomics.

FINANCIAL ECONOMICS- SEM 3RD SKILL ENHANCEMENT COURSE

• This course introduces students to the economics of finance. It implies supply and demand aspect of the capital. The purpose of the paper is to impart the knowledge and train the learners to the tit- bits of the financial aspects of the economy and to keep pace with the changing global financial and investment scenario

PRINCIPLES OF MACRO ECONOMICS-II – 4TH SEM

• This is a sequel to Principles of Macroeconomics–I. It analyses various aspects of macroeconomics in greater detail. It makes the student familiar with the concepts of BOT, BOPs and Foreign exchange rate. It also exposes the students to understand the concept of inflation, its relationship with unemployment and some basic concepts in an open economy

$\textbf{DATA ANALYSIS} - 4^{TH} \textbf{ SEM}$

• This course introduces the students to Collection and Presentation of data. It also discusses how data can be summarized and analyzed. Students will also be trained to calculate and use few statistical tools.

ECONOMIC DEVELOPMENT AND POLICY IN INDIA-I – 5th SEM

• The objectives of this course on Economic Development and Policy in India- 1 is enable students to have an understanding of the various components of Indian economy so that they are

able to comprehend and critically appraise current Indian problems. This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the Post- Independence period.

MONEY AND BANKING- 5th sem

• Money and Banking constitute the important components towards understanding of Economics. A clear understanding of the operations of money and banking and their interaction with the rest of the economy is essential to realise how monetary forces operate through a multitude of channels – market, non-market institutions and among others, the state. Accordingly, the paper on 'Money and Banking' is an integration of monetary theory, banking institutions and government which combines with itself a systematic discussion of the theory, institutions and policy with special reference to India.

STOCK MARKET -5th Sem

• This course on Stock Market will provide the students a little understanding and knowledge of the stock market operations in terms on structure, trading and settlement procedures, instruments, processes and related components. It will focus on primary market, secondary market and the issues related to BSE and NSE.

PUBLIC FINANCE 6th Sem

• This course provides an overview of Government into the efficiency and equity aspects of taxation of the center, states and the local Governments and the issues of fiscal federalism and decentralization in India. It will provide the students a thorough understanding and knowledge of Government finances with special references to India.

3. DEPARTMENT OF BBA

Department of Business Administration was established in the year 2011 in Govt Maulana Azad Memorial college to offer three-year graduate degree programme in Business Administration. The Department is committed to produce competent professionals who are dynamic and responsible enough to handle higher managerial responsibilities.

LINK FOR THE SYALLBUS: <u>https://www.clujammu.in/syllabus/syllabus.php</u>

PROGRAMME OUTCOMES

PO1: CRITICAL THINKING SKILL: Students are able to define, analyze, and devise solutions for various business problems and issues using cohesive and logical reasoning patterns for evaluating information, materials, and data

.PO2: COMMUNICATION SKILL: Students are able to conceptualize complex issue into a coherent written statement and oral presentation.

PO3: COMPUTER SKILL: Students are competent in the uses of technology in modern organizational operations.

PO4: ENTREPRENEURSHIP SKILL: Students can demonstrate the fundamentals of creating and managing innovation, new business development, and high-growth potential entities.

PO5: BUSINESS KNOWLEDGE: Students can demonstrate technical competence in domestic and global business through the study of major disciplines like marketing, finance, human resource management and production within the fields of business.

PO6: ETHICS: Apply ethical principles and commit to professional ethics and responsibilities and norms of the Management practice.

PO7: ENVIRONMENT AND SUSTAINABILITY: Students can understand the impact of the professional solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development by studying subject like Environment Sciences.

PO8: TEAM WORK: Students can function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9: PROJECT MANAGEMENT AND FINANCE: Demonstrate knowledge and understanding of the management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

<u>COURSE OUTCOMES</u>

BBA 1st Sem

a) FUNDAMENTAL OF MANAGEMENT AND OB

CO1. Assume the roles and responsibilities associated with managerial functions.

CO2. Identify the key contributors and their contributions in the development of management thought.

b) STATISTICS FOR BUSINESS DECISIONS

CO1. Appraise the need for data analysis and formulate the statistical problem and solve it.

CO2. Interpret the results of statistical analysis for improved managerial decision making.

BBA 2ND Sem

a) BUSINESS ACCOUNTING

CO1. Demonstrate the role of accounting in business in economic world.

CO2. Explain the principles of accounting and book keeping

CO3. Apply accounting rules in determining financial results and preparation of financial statement

b) MANAGERIAL ECONOMICS

CO1. Analyze economic problems and can corelate scarcity with the requirements.

CO2. Evaluate demand and analyse cost in order to optimise cost-production combination.

CO3 Recognize the existing market and can take appropriate decisions.

BBA 3RD SEM

a) HUMAN RESOURCE MANAGEMENT

CO1. 1. Demonstrate the understanding of theoretical concepts and framework required for effective Human Resource Management.

CO2. Develop an overview on various functions and processes of human resource management. CO3. Identify the human resource needs of an organization and plan accordingly.

b) PRINCIPLES OF MARKETING

CO1. Explain the core concepts of marketing and the goals of the Marketing function

CO2. Analyze the environment and recommend appropriate Segmentation, Targeting and Positioning Strategy for a product and analyze the buying behavior of a given target market segment

CO3. Recommend suitable product, pricing, distribution and Marketing Communication strategies for a brand to achieve the Marketing objective.

c) MANAGEMENT ACCOUNTING

CO1. Able to explain accounting statements and can analyze the financial statement with ratio and cash flow analysis.

CO2. Apply various cost control techniques for profit Maximization.

CO3. Able to explain changes in financial position of corporate entity and solve complex managerial problems.

d)PERSONALITY DEVELOPMENT AND COMMUNICATION SKILL

CO1. Relate to the various concepts and processes of personality and communication.

CO2. Identify the gap between current level of communication skills and the expected industry standards.

CO3. Develop essential personality & communication skills required for managing a business.

BBA 4TH SEM

a) BUSINESS RESEARCH

CO1. Describe the research process and list the characteristics of various types of research.

CO2. Formulate Research Problem, Research Objectives and Hypothesis from a given research problem.

CO3. Describe various research designs and methods of data collection.

b) MACRO ECONOMICS

CO1. 1 Explain and analyze the workings of Indian Financial system, Market and its assets

CO2. Explain the role of money market in Indian Financial System and the importance of legal framework.

CO3. Describe the organizational structure of RBI as well as the Monetary Policy.

c). FINANCIAL MANAGEMENT

CO1. Describe operational, business, financial and traditional risk.

CO2. Distinguish among various financial intermediaries and markets.

CO3. Explain the new and innovative financial services of India.

d). SOFT SKILL FOR MANAGERS

CO1: To develop both oral and written communication skills relating to Organizational and Business issues

CO2: To develop an individual's soft skill with regard to the different behavioural dimensions that have far reaching significance in the direction of organizational effectiveness.

BBA 5TH SEM

a) QUANTITATIVE TECHNIQUES FOR MANAGEMENT

CO1. 1. Resolve the equations related to Linear programming.

CO2. Identify the specially structured programming of transportation and assignment

CO3. Analyze the decision-making problems under uncertainty and competitive situations

b) LEGAL ASPECT OF BUSINESS

CO1. Apply basic legal knowledge related to formation and incorporation of companies.

CO2. Communicate effectively the procedure of capital formation in company.

CO3. Understand the documentation of company like memorandum of association, articles of association and prospectus.

c) PROJECT WORK

CO1. To acquaint the students with field work in an Industry/organization within and outside the state.

CO2. To help students in the construct of a questionnaire for collection of primary data keeping in mind the topic chosen for Project work.

CO3.Helping the students in presenting PPT.

DSE 1 INDIAN BANKING SYSTEM

CO1. Analyze the Indian banking system and its recent trends.

CO2. Integrate processes according to the functioning of Reserve Bank of India and commercial banks in Indian banking system and analyzing the dimensions of banker customer relationships.

DSE 2 MARKETING OF SERVICES

CO1. To equip students with the knowledge of Marketing of all types of Services.

BBA 6TH SEM

a) ADVERTISING AND BRAND MANAGEMENT

CO1. To equip the students with the basic understanding of Advertising and Brand Management.

CO2. To acquaint the students with the basic art of designing an advertisement.

a) BUSINESS POLICY AND STRATEGIC MANAGEMENT

CO1. Analyze strategy implementation alternatives for effective decision making.

CO2. Understand the strategic requirements and correlation between business plans with strategic plans.

CO3. Identify and evaluate different alternative strategies for effective decision-making

b) FINANCIAL INSTITUTIONS AND MARKETS

CO1. Explain and analyse the workings of Indian Financial system, Market and its assets

CO2. Explain the role of money market in Indian Financial System and its regulatory environment.

CO3. Explain the role of capital market in Indian Financial System and its regulatory environment. **DSE**

a) ADVERTISING AND BRAND MANAGEMENT

CO1. To equip the students with the basic understanding of Advertising and Brand Management.

CO2. To acquaint the students with the basic art of designing an advertisement.

b) CONSUMER BEHAVIOUR

CO1. This Course aims to make students understand the concept of Consumer and their behaviour

CO2. To acquaint students with consumers perceptions and attitude while buying a commodi

4. DEPARTMENT OF SOCIOLOGY

PROGRAM OUTCOMES

Sociology as a subject is of a great importance to all. As we all live in the society which keeps on changing with time, so to aware people especially young students about their surroundings sociology as a subject helps them alot. It helps the students understand various basic concepts of the society especially the basic social institutions of the society such as family, marriage, kinship, religion, education and so on. This subject helps them understand their Indian society and its features in a better way. Various other students from different streams are also taking Sociology as a generic course along with their main subjects as this helps them to understand their social world better. This subject prepares the student to face the challenges which are always there in the outer world. It helps them to gain confidence as they can understand their outer world better with the help of this subject. The subject has no limitations. Even students from different streams such as Business management, Physics, English etc. are taking this subject as this will help them gain knowledge and make them a better human being.

LINK FOR THE SYLLABUS : https://www.clujammu.in/syllabus/syllabus.php

Sl.No	Semester	Course Code	Course Title	Course Outcomes
1.	Ι	ISOCTCO101	Introduction to Sociology	To acquaint the students with the fundamental concepts of Sociology. To make the students understand Sociological perspectives and concepts.
2.	Π	ISOCTC0201	Sociology of India	To familiarize the students with the identities, changes and challenges in Indian society. To make students understand the diversified of Indian society and basic features.
3.	III	ISOCTCO301	Sociological theories	To make students with the history ofSociologicaltheories.Tomake students understand thedifferent Sociological approaches
4.	III	ISOCSEO302	Gender Sensitisation	To sensitise the students about the social construct of gender problems. To make students understand thegender issues in present society.

COURSE OUTCOMES

5.	IV	ISOCTCO401	Methods of Sociological enquiry	Acquaint the Students with different components of Social Research - To make students understand the various research designs in Sociological Research. - To Acquaint the students with utilization of Statistical Techniques in Social Research
6.	IV	ISOCSE0402	Current Social Problems	To familiarize the students to the current social problems in society. To make them aware about the various issues which societies are facing
7.	V	ISOCDE0505	Rural Sociology	To make students understand the basic concepts of rural society. To make the students understand the various dimensions of agrarian institutions.
8.	V	ISOSE0501	Social Institutions in India	To sensitise the students about the familial and matrimonial nature in India. To acquaint the students with the social institutions in India
9.	V	OSOCGENE 01	Basic Sociological Concepts	To make the students understand the Sociological perspectives. To make the students understand the basic and fundamental concepts in Sociology
10.	VI	ISOCDE0601	Tribal Society in India	To acquaint the students with tribal social structure. To make students understand the classifications of the tribal society in India. To familiarize the students to the socio- economic and political institutions of Indian tribal society.
11.	VI	ISOCSE0602	Social change, development and globalisation	To acquaint the students with the process of social change and its theories
12.	VI	OSOCGENE 03	Indian society issues and problems	To familiarize the students to various concepts of social problems. To acquaint the students with social problems and different approaches

SOCIOLOGICAL PERSPECTIVES.

- To make them understand various concepts such as family kinship, religion and other basicinstitutions.
- To make them understand their different societies better such as urban, rural, agrarian as wellas tribal.
- To familiarize them with various research techniques which help students in their future studies.

- To make them understand the concepts such as globalization, sustainable development and various other concepts which students are not aware of.
- Last but not the least it helps the students to become a better human being.

5. DEPARTM ENT OF EDUCATION

PROGRAM OUTCOMES

The Under Graduate programme in Education Major helps the students to understand the meaning, aims, function and role of Education. They are able to employ critical thinking and efficiency in problems solving ability in Education. The course explains the Indian and Western schools of Philosophy and their impact on Education. It discusses the contribution of great educators. The students after completing course at Graduation level in Education will develop an understanding of major concepts, theoretical principles in Education. The course also involves understanding the meaning and different perspectives of psychology and different theories of intelligence. The recommendations of the different Education Commissions are also included in the syllabus. By analyzing the various problems faced by the mentally and physically challenged children, an awareness program can be designed to encounter the problems of challenged children. Micro-teaching, preparing lesson- plans, practice teaching in schools which are integral parts of the syllabus will train the students in teaching skills. Students will also gain a reasonable knowledge in psychology. On successful completion of the course the students become efficient for teaching activities and guiding others to become good citizens in the society by usage of value education.

LINK FOR THE SYLLABUS: https://www.clujammu.in/syllabus/syllabus.php

COURSE OUTCOMES

The Course Outcome of all the courses in the subject Education starting from Core Courses, Discipline Specific Courses to Skill Enhancement Courses and Generic Courses are developed in such a way that the students are able to Know, Understand, Apply, Analyze, Evaluate and Create new information or knowledge related to various broad fields and concepts like Education, Psychology, Philosophy, Sociology, Indian Heritage, Issues And Trends In Contemporary Indian Education to Yoga Education, Methods of Data Analysis and Educational Evaluation And Psychological Testing etc. Thus, the courses open the vision of the students to new Horizons of knowledge

SEM-l

CORE COURSE: SOCIOLOGICAL AND PHILOSOPHICAL BASIS OF EDUCATION

- This course aims at developing an understanding among the pupils about the concept, nature and process of the education.
- This course aims at developing the socio- philosophical perspectives of the learner regarding education.
- It aims to sensitize students towards their connectedness and accountability to the society at large.
- The course aims to inculcate humanitarian and moral values among the students.

SEM- II

CORE COURSE EDUCATION AND PSYCHOLOGY

- To develop an understanding of the relationship between Education and Psychology.
- To enable the students to understand the concepts and stages of growth and development.
- To understand the laws of learning and the role of motivation and maturation in learning.

SEM- III

CORE COURSE: EDUCATION AND INDIAN HERITAGE

• This course enables the students to gain knowledge about the development of the education systemduring various periods of history right from the Vedic period.

SKILL COURSE: METHODS OF DATA ANALYSIS

- This course aims at developing an understanding of the nature of educational data.
- Develops the skill to carry out qualitative and quantitative analysis of data.
- Apply important statistical techniques for analyzing and interpreting research data.

SEM- IV

CORE COURSE: EDUCATIONAL PSYCHOLOGY AND PEDAGOGY

- This course enables the students to have an understanding of Educational Psychology.
- It also creates awareness about important concepts like intelligence, creativity, and personality.
- Develops an understanding of the teaching and learning process.

SKILL ENHANCEMENT COURSE: YOGA EDUCATION:

- This course is aimed at leading an individual learner to spiritual as well as physical development.
- To develop an awareness about various Asanas, Pranayama, Dhyana, etc.

SEM- V

DISCIPLINE SPECIFIC COURSE: ISSUES AND TRENDS IN CONTEMPORARY INDIAN EDUCATION

• This course will enable the learner to know about various programmes that are being launched from time to time towards the universalization of elementary education and also about other stages of education in India.

SKILL ENHANCEMENT COURSE- PRACTICUM

• This course is an internship type of course wherein the students are encouraged to have practical knowledge about the working of schools (both about teaching and administrative affairs).

GENERIC COURSE: EDUCATIONAL EVALUATION AND STATISTICS IN EDUCATION

- This course aims at developing the knowledge of measurement and evaluation in education.
- Knowledge about various teaching tools and the application of statistical techniques in education.

DISCIPLINE SPECIFIC COURSE -EDUCATIONAL GUIDANCE AND CURRICULUM CONSTRUCTION

- To understand the meaning, principles, needs, and types of guidance and counseling.
- To develop an understanding of the concept and needs of the curriculum, its determinants, and principles of construction, development, and evaluation.

SKILL ENHANCEMENT COURSE- PSYCHOLOGICAL TESTING

• This course aims at developing practical knowledge about various research tools.

GENERIC COURSE

- To enable the learner to understand the role of educational technology in education.
- To enable the learner to get familiarized with new trends and techniques in education along with e-learning.

6. DEPARTMENT OF POLITICAL SCIENCE

PROGRAM OUTCOMES

Political science is an excellent subject for preparing students for effective citizenship. Political Science grounds students in the importance of political participation and prepares them to take part in the political life of their communities and nations. Different courses provided to the students help themto know about their rights and duties. The aim today isn't to produce passive spectators regarding the administration. Vigilant citizens can prevent encroachment of their rights by the state and other internal agencies. The subject educates them about the ideals of patriotism, toleration, sacrifice, and national integration and helps them to rise above different kinds of parochialism like regionalism, casteism and communalism. By educating and training the students about various aspects of government and administration the subject is helping to produce future leaders of the country. Different courses offered to the students such as Comparative Politics, International Relations, etc have helped to introduce the students to political concepts like political behavior, policy issues, structures of the government within the societies and among the nations, understanding political ideas, ideologies, institutions, diplomacy, Law, strategy and war. It has also helped them to understand critical issues such as globalization, foreign policy, terrorism environment and gender issues, civil rights, and political development. Political science has been offered as a generic subject at UG and PG levels. It has provided knowledge to the students about their Political System and they will be able to cherish the ideals of the Indian Constitution. Thus, the significance of this subject cannot be undermined. As G.B. Shawhas aptly observed that "Political Science is the science by which alone civilization can be saved".

LINK FOR THE SYLLABUS

https://www.clujammu.in/syllabus/syllabus.php

COURSE OUTCOMES

The subject of political science has a wide range of objectives

(a) It has familiarised the Citizens with the concepts of political participation and prepared them to participate in the political life of the nation, thereby producing enlightened and vigilant citizens.

(b) It has provided in-depth knowledge about the rights and the duties of the Citizens.

(c) This subject helps students and citizens to understand political institutions, practices and relations that constitute public Life and modes of inquiry that promote citizenship. It helps in solving the problems at the grassroots level.

(d) This subject enhances social skills as well as analytical and critical thinking ability.

- (e) It encourages personal growth.
- (f) It focuses on human behaviors individually and collectively.

(g) This subject helps in the study of government, power, political relations and the political behaviour.

(h)This subject has helped to develop valuable analytical and communication skills. It helps to

develop theoretical tools for the interpretative politically meaningful phenomenon.

(i) It has made the students aware of their responsibilities not only as of citizens of their own country but also as member of the global community.

7. DEPARTMENT OF GEOLOGY

PROGRAM OUTCOMES

The broad objectives of the Program are:

Geology is a specific subject of Science with a Multidisciplinary approach.

Students doing graduation with B.Sc. in Geology should be able to: -

- Understand the basic geological concept, principles and theories of stratigraphy.
- Learn, design and perform experiments in the labs to demonstrate the concepts, principles and theories learned in the classroom.
- Expose the student to the vast scope of Geosciences in the field of disaster management, watershed management, water pollution, oil exploration, mining, etc.
- Emphasize the importance of geology as the most important discipline for sustaining the existing industries and establishing new ones to create job opportunities at all levels of employment.

Engineering Geologists – Engineering Geologists investigate the site before any foundation or earthworks are started for a very large civil engineering project begins. Environmental Geologists are concerned with the issues related to the disposal of waste of all its types which evaluate the environmental impact of the construction projects.

Geo-Hydrologists take care of the water. They asses and analyze the sources and identify the threats to eliminate water pollution. They play a crucial role in the construction of reservoirs.

Geomorphologists – It is a study related to erosion and glaciations. They study the process of erosion and glaciations and take necessary remediation to eliminate the issue.

Hydrologists and Mineralogists are responsible for identifying, measuring and analyzing the source ofwater and minerals. Mineralogist analyzes the minerals and precious stones in rocks and mineral and determines their usage in various industries.

Marine Geologists are a role who studies the physical aspects of the oceans and their current streams.

Petroleum Geologists is a very important and most demanding job role. They conduct the tests and locate the presence of natural gas, and oil deposits both onshore and offshore sites.

Paleontologist's study ancient fossils. They help in tracing the evolution of plant and animal life and estimate their existence on the earth.

Seismologists are a job role where they interpret the data of the earth's tectonic moments and identify the earthquakes and earthquakes prove areas.

Stratigraphers are the study of the distribution and arrangement of sedimentary rock layers of both land and the sea. They help us in understanding and knowing the layers and it's a distribution of 5he land and sea.

Geologists– It is the most common role where the job's main prospect is to teach and carry out academic research in universities and colleges.

LINK FOR THE SYLLABUS

https://www.clujammu.in/syllabus/syllabus.php

COURSE OUTCOMES

SEM	Course Name	Course Objective
1	Structural and Physical 1GELTC0101	 Understand the basic geological concept, principles and theories. Learn, design and perform experiments in the labs to demonstrate the concepts, principles and theories learned in the classroom. Expose the student to the vast scope of Geosciences in the field of disaster management, oil exploration, mining, etc.
2	Crystallography and Mineralogy 1GELTC0201	 The course is designed to understand the basics of mineralogy and crystallography which helps to gain overall knowledge in Geology. The course deals with the study of crystals concerning their morphology, symmetry, notations, normal crystal classes and various laws of crystallography. The course deals with the study of minerals, their physical, chemical and optical characteristics. The students will be able to identify common rockforming minerals in hand specimens and in thin sections. The students will gain knowledge about various mineral groups
3	Field recognition of geological structures. 3GELSE0202	 Introduction to various processes of mineral deposit formations. Study of selected ore-minerals and mineral deposits of India concerning their mode of occurrence, geographic distribution and economic importance.

	D. 1	• The course of this paper is designed to understand the
4	Petrology	• The course of this paper is designed to understand the processes involved in the formation of rocks i.e.
	IGELTC0301	buildingblocks of earth.
		• The students will be able to understand the formation
		of igneous, metamorphic, and sedimentary rocks.
		They acquaint themselves about various processes
		responsible for the formation of different types of
		rocks.
		• The students will understand the forms, structure,
		texture of igneous rocks interpreting crystallization
		history.
		• The course presents an understanding of the effects of
		high temperature and pressure transforming affected
		rocks into metamorphic rocks.

5	Gemology 1GELSE0301	 The students will know the processes of sedimentation, lithification, diagenesis which convert loose sediments into consolidated sedimentary rocks Gemology is the study of science in which you can learn how to identify the natural gem, diamonds, stones, asteroids, etc. In this course, you can also learn about the depth knowledge of gems.
6	Environmental Geology 1GELSE0302	 To render the understanding of interdependent nature and processes operative over earth surface. The concept of systems in nature and the paradigm of environmental thinking. Various setups of environments and the alarm ofglobal warming. The techniques of evaluations and the concerning impact of human development on environment systems, impact on surface and subsurface water resources. Concept of the naturally deteriorating system as desertification concept and quality of self-balancing systems in nature and human interference. Understanding of energy resources exploitation and interference. Natural hazardous systems

7	Stratigraphy and Paleontology 1GELTC0401	 Demonstrate understanding of the nature of fossils and types of fossilization that turn organic remains into fossils. Be able to recognize the major groups of invertebrate fossils based on their morphology and be able to identify key index fossils to the species level. Use fossils to recognize the age of sedimentary strata. Demonstrate understanding of the uses of fossils in solving geological problems: paleoenvironments, relativeage, paleo-ecology. Demonstrate understanding of the fundamental stratigraphic units and the scientific methods for determining the relative and absolute ages of Earth materials and events. Be able to determine the depositional environment from rock type and outcrop pattern. Understand the age and significance of depositional sequences. Be able to decipher the geological history of an area from ageological map. Knowledge of the stratigraphy of India. Information about fossil content; and mineral deposits
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		associated with the stratigraphic units.
8	Field Geology 1GELSE0401	 Application of geological knowledge in civil engineeringlike dams, tunnels and canals. Hydrological properties of rocks and occurrences of groundwater. Basic idea and application of photogeology in mineralexploration. Introduction to surface and subsurface mining.
9	Economic Geology 1GELDE0501	 Know the basic concept and various techniques of mineralexploration, drilling, sampling. Students will be able to know the national and state mineral policies and concession rules.
10	Hydrogeology 1GELDE0502	 The course helps students to learn about environmental considerations in the site selection of construction of damand tunnel. This course intends to introduce the fundamental principles and techniques of remote sensing and photogeology and the application of these techniques. On completion, of course, the student will have gained anunderstanding of the occurrence and movement of groundwater.
11	Evolution of Life 1GELDE0503	 Demonstrate understanding of the nature of fossils andtypes of fossilization that turn organic remains into fossils. Be able to recognize the major groups of invertebratefossils based on their morphology and be able to identify key index fossils to the specieslevel. Use fossils to recognize the age of sedimentary strata. Demonstrate understanding of the uses of fossils in solving geological problems: paleoenvironments, relative age, paleo-ecology. Demonstrate understanding of the fundamentalstratigraphic units and the scientific methods for determining the relative and absolute ages of Earthmaterials and events. Be able to determine the depositional environment fromrock type and outcrop pattern. Understand the age and significance of depositional sequences. Be able to decipher the geological history of an area froma geological map.

12	Geochemistry and its applications 1GELSE0501	 The course of this paper is designed to understand the processes involved in the formation of rocks i.e., buildingblocks of earth. The students will be able to understand the formation of igneous, metamorphic and sedimentary rocks. They acquaint about various processes responsible for the formation of different types of rocks.
13	Remote sensing and its applications 1GELSE0502	 The students will be able to know the basic earth scienceas applied to the interaction between human activity and the natural environment. The students will gain knowledge about soil formation and types of soil.
14	Elements of applied geology 1GELDE0601	 Introduction to various processes of mineral deposit formations. Study of selected ore-minerals and mineral deposits of India concerning their mode of occurrence, geographic distribution and economic importance. Origin and occurrences of coal and petroleum deposits and their distribution in India. Application of geological knowledge in civil engineeringlike dams, tunnels and canals. Hydrological properties of rocks and occurrences of groundwater. Basic idea and application of photogeology in mineral exploration. Introduction to surface and subsurface mining.
15	Fuel Geology 1GELDE0603	 Demonstrate understanding of the nature of fossils Fuelsand types of fossilization that turn organic remains into fossil fuels. Understanding of energy resources exploitation and interference.
16	Introduction of geophysics 1GELDE0603	 Learn, design and perform experiments in the labs to demonstrate the concepts, principles and theories learned in the classroom. Expose the student to the vast scope of Geosciences in the field of disaster management, watershed management, water pollution, oil exploration, mining etc.

17	Mineral exploration 1GELSE0602	•	Know the basic concept and various techniques of mineralexploration, drilling, sampling. The course deals with the study of minerals, their physical, chemical and optical characteristics. The students will be able to identify common rock

8. DEPARTMENT OF CHEMISTRY

PROGRAM OUTCOMES

- The programme is designed to provide the students a comprehensive understanding of the fundamentals of chemistry covering all principles, theories and concepts.
- The different branches of chemistry (Organic, Inorganic and physical) expose the diversified aspects of chemistry.
- The students experience a broader outlook of the subject. The syllabus of the BSc course is designed to give stepwise advancement of knowledge to the students.
- The laboratory courses offer an opportunity to students to have hands-on experience on basictechniques about practicals including handling of apparatus and other chemicals involved.

LINK FOR THE SYLLABUS

https://www.clujammu.in/syllabus/syllabus.php

COURSE OUTCOMES

To make the students understand the concepts of

- **Sem 1**Atomic structure, chemical bonding, general organic chemistry and aliphatic hydrocarbons.
- Sem 2 chemical energetic, equilibria and functional organic chemistry
- Sem 3 Functional group organic chemistry, solutions, phase equilibrium, electrochemistry and states of matter (1)
- Sem 3 Skill pesticides and green methods in chemistry
- Sem 4 states of matter (2), chemical kinetics and coordination chemistry
- Sem 4 Skill Pharmaceutical chemistry, analytical clinical biochemistry
- Sem 5 inorganic materials of industrial importance
- Sem 5 Skill, Intellectual property rights and business skills
- **Sem 6**Molecules of life, nucleic acids, carbohydrates, amino acids, enzymes, lipids, fats, oils, bioenergetics
- Sem 6 Skill basic analytical and environmental chemistry

• **Practical** salt analysis, identification of organic compounds, volumetric analysis, preparations, paper chromatography, saponification value, iodine value, TLC etc..

9. DEPARTMENT OF PSYCHOLOGY

PROGRAMME OUTCOMES

The psychology programme is offered to students as one of the subjects for pursuing a B.A. The course equips the students to develop a basic knowledge of psychological concepts and their application in real-life settings. By the time of completion of the Bachelor's degree with psychology as one of the subjects, the students will be able to:

- Describe key concepts, principles, and overarching themes in psychology.
- Develop a working knowledge of psychology's content domains
- Describe applications of psychology
- Use scientific reasoning to interpret psychological phenomena
- Engage in innovative and integrative thinking and problem-solving
- Interpret, design, and conduct basic psychological research
- Apply ethical standards to evaluate psychological science and practice
- Apply psychological content and skills to career goals
- Demonstrate effective teamwork skills
- The course also enables the students to develop a deeper understanding of psychological concepts that can be used by them for qualifying certain competitive examinations like UPSC etc.
- Develop meaningful professional direction for life after graduation by providing them with a basic orientation about skills required to be a counselor, mental health professional, organizational psychologist, social and community psychologist, etc

COURSE OUTCOMES

Sem –I

Course Code: 1PSYTC0101 Course Title: Foundations of Psychology

Learning Outcomes: The course is designed to acquaint the students with the basic foundations of psychology. It includes various issues & theoretical frameworks of cognition, learning, motivation, emotion, intelligence and personality. With this course, the students will be able to develop an understanding of the basic psychological processes and their applications in everyday life.

Course Code: 1PSYPC0101 Course Title: Practicum in Foundations of Psychology

Learning Outcomes: Students will be able to demonstrate an understanding of the concepts learned in the theory course of the foundation of psychology and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Sem-II

Course Code: 1PSYTC0201 Course Title: Introduction to Social Psychology

Learning Outcome: This course aims at enabling students to appreciate how individual behavior is influenced by social and cultural contexts. At the end of the course, the students will be able understand how social behavior can be analyzed in terms of social-psychological theories and also to realize how social psychological knowledge can be used in solving social problems.

Course Code: 1PSYPC0201 Course Title: Practicum in Social Psychology

Learning Outcomes: Students will be **a**ble to demonstrate an understanding of the concepts learned in the theory course social psychology and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Sem-III

Course Code: 1PSYTC0301 Course Title: Psychological Disorders

Learning Outcomes: To acquaint the students with the nature of various manifestations of psychological disorders. At the end of the course, the students will be able to develop a basic understanding of the etiology and treatment of psychological disorders including Anxiety Disorders, Somatoform Disorders, Personality Disorders, Mood Disorders and Schizophrenia to develop an understanding of various psychological disorders and their treatment.

Course Code: 1PSYPC0301 Course Title: Practicum in Psychological Disorders

Learning Outcomes: With this course, students will be able to demonstrate an understanding of the concepts learned in the theory course of psychological disorder and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Course Code: 1PSYSE0301 Course Title: Applications of Social Psychology

Learning Outcomes: To apply the principles of social psychology to understand and deal with social issues. The essential themes of stress, coping with stress, various interventions, groups, and their norms have been adequately incorporated in the course for an effective acquaintance of the subject. Also, the knowledge of the applications of social psychology is intended to make students cognizant of the concepts that have relevance at the workplace like leadership, Job Satisfaction, Organizational Citizenship Behavior, and Whistle Blowing.

Learning Outcomes: To Introduce basic statistical methods, psychological testing and research methods and their uses. This course aims at familiarizing the students with the analysis and computation of various statistical techniques like measures of central tendency, correlation and t-test. The course will also subsequently enable the students to appreciate the relevance of quantitative and qualitative methods in psychological research and understand the process of standardizing psychological testing.

Course Code: 1PSYPC0401 Course Title: Practicum in Statistical Methods and Psychological Research

Learning Outcomes: The course will help the students to demonstrate an understanding of the concepts learned in the theory course related to psychological testing, research and statistical techniques and to enhance students' ability to apply these techniques for practical application psychological tests in research.

Course Code: 1PSYSE0401 Course Title: Managing Stress

Learning Outcomes: To develop among students an understanding of the nature, sources and types of stress. The course will assist the students to comprehend different theoretical approaches to stress. The students will gain an insight in to stress and different personality types; stress and illness; and also learn ways of coping with stress.

Sem-V

Course Code: 1PSYTC0501 Course Title: Life Span Development

Learning Outcomes: This course is designed to provide an in-depth study of developmental psychology, to understand how human life unfolds from conception to late adulthood and to comprehend the relationship between theory and applications within each domain of development. The students will be able to understand the principles of physical, social & cognitive development of human beings at different stages of development.

Course Code: 1PSYPC0501 Course Title: Practicum in Life Span Development

Learning Outcomes: At the end of this course, the students will be able to demonstrate an understanding of the concepts learned in the theory course of life span development and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Course Code: 1PSYTC0502 Course Title: Health and Well-Being

Learning Outcomes: The students will be able to develop an understanding of health and how to maintain health and well-being. They will also be acquainted the students with the nature and significance of the emerging area of health psychology. It will highlight the importance of social and psychological processes in the field of health.

Course Code: 1PSYPC0502 Course Title: Practicum in Health and Well-Being

Learning Outcomes: Students will be able to demonstrate an understanding of the concepts learned in the theory course of health and well-being and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Course Code: 1PSYSE0501 Course Title: Managing Human resources

Learning Outcomes: The course is designed to help students gain an insight into the theoretical and practical perspectives, concepts, and key aspects of human resource management. The students will be able to comprehend various aspects of planning, job analysis, and recruitment with a focus on the development and appraisal of human resources

Course Code: 1PSYGENE01 Course Title: Positive Psychology

Learning Outcomes: The course will help students to develop an understanding of the concept of positive psychology and to apply the various principles of positive psychology for self development..

Course Code: 1PSYGENP01 Course Title: Practicum in Positive Psychology

Learning Outcomes: Students will be able to demonstrate an understanding of the concepts learned in the theory course of positive psychology and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Sem-VI

Course Code: 1PSYTC0601 Course Title: Organizational Psychology

Learning Outcomes: The course provides fundamental knowledge about basic concepts, theories, and **te**mergence of organizational psychology/organizational behavior, to develop an understanding of employees' work-related attitudes, to discuss theoretical and practical implications of motivating employees at work, and to demonstrate the significance of leadership and positive psychology at work place. It will help the students to understand workplace behavior which has micro and macro perspectives in organizations and subsequently assist them to apply the theoretical knowledge to applied settings.

Course Code: 1PSYPC0601 Course Title: Practicum in Organizational Psychology

Learning Outcomes: Students will be able to demonstrate an understanding of the concepts learned in the theory course of organizational psychology and to enhance students' ability to apply psychologicaltests and experiments in the relevant field.

Course Code: 1PSYTC0602 Course Title: Counselling Psychology

Learning Outcomes: At the end of the course, students will develop an understanding of basic concepts, approaches, processes, and applications of counseling. The course is designed to provide an in-depth study of the counseling process. It includes the detailed study of concepts, goals, and ethical issues in counseling; approaches to counseling, and adopting the counseling process to specific populations. It will orient the students for counseling in school as well as in clinical settings.

Course Code: 1PSYPC0602 Course Title: Practicum in Counselling Psychology

Learning Outcomes: Students will be able to demonstrate an understanding of the concepts learned in the theory course of counseling psychology and to enhance students' ability to apply psychological tests and experiments in the relevant field.

Course Code: 1PSYSE0601 Course Title: Psychology in Education

Learning Outcomes: Students will be able to understand how the principles of psychology can be applied to the area of Education. The course incorporates a deeper understanding of children with special needs and the various provisions for effective learning in classrooms.

Course Code: 0PSYGENE02 Course Title: Self and Personal Growth

Learning Outcomes: The course will enable the students to grasp the essentials for embarking on a journey within. The understanding of self through self-actualization along with some Indian themes would contribute towards the development of character strengths.

Course Code: 0PSYGENP02 Course Title: Practicum in Self and Personal Growth

Learning Outcomes: Students will be able to demonstrate an understanding of the concepts learned in the theory course of self and personal growth and to enhance students' ability to apply psychological tests and experiments in the relevant field.

10. DEPARTMENT OF ELECTRONICS

PROGRAM OUTCOMES

We are offering Electronics as one of the subjects in B.Sc. (General) Course and also offering Skill courses span from Renewable Energy to Digital Electronics. After the end of the course students is going to understand:

- 1. The basis of Electronics and electronics circuits.
- 2. Working of microprocessor and microcontrollers
- 3. Designing basic experiments in Electronics
- 4. Working with small projects using microprocessors and microcontrollers
- 5. Understand the basics of Communication electronics
- 6. Solving problems with C-programming

7. Understanding the core of Semiconductor Electronics which is the basics of Microelectronics and Nanotechnology

8. Basis of renewable energy and how the development of renewable energy helps in mitigating climate change and global warming

COURSE OUTCOMES

We are offering Electronics as one of the subjects in B.Sc. (General) Course and also offering Skill courses span from Renewable Energy to Digital Electronics. After the end of the

course students are going to understand:

- 1. the basis of Electronics and electronics circuits.
- 2. Working of microprocessor and microcontrollers
- 3. Designing basic experiments in Electronics
- 4. Working with small projects using microprocessors and microcontrollers
- 5. Understand the basics of Communication electronics

6. Understanding the core of Semiconductor Electronics which is the basics of Microelectronics and Nanotechnology

7. Basis of renewable energy and how the development of renewable energy helps in mitigating climatechange and global warming

11. DEPARTMENT OF MATHEMATICS

PROGRAMME OUTCOMES

a) B.A / BSC./BCA MATHEMATICS

By the End of the B.A/ B.Sc / BCA programme, Scientific temper will be developed in Students. Studentswill acquire basic Practical skills & Technical knowledge along with domain knowledge of different subjects in the science stream. Students will become employable; they will be eligible for career opportunities in Industry, operational Researcher, banking jobs after B.Sc, Financial/investment Analyst, or will be able to opt for entrepreneurship. Students will possess basic subject knowledge required for higher studies, professional and applied courses like Management Studies, Law, etc. Students will be aware of and able to develop a solution-oriented approach towards various Social and Environmental issues. A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations, terminology. A student should get adequate exposure to global and local concerns that explore many aspects of mathematical sciences. The student is equipped with mathematical modeling ability, problem-solving skills, creative talent, and power of communication necessary for various kinds of employment. Students should be ableto apply their skills and knowledge that translates information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques to process the information and draw the relevant conclusion. Enabling students to develop a positive attitude towardsmathematics as an interesting and valuable subject of study.

b) B.SC HONS

The Bachelor's Degree in B.Sc. (Hons) Mathematics is awarded to the students based on knowledge, understanding, skills, attitudes, values, and academic achievements sought to be acquired by learners at the end of this program. Hence, the learning outcomes of mathematics for this course areaimed at facilitating the learners to acquire these attributes, keeping given their preferences and aspirations for knowledge of mathematics. Mathematics is the study of quantity, structure, space and change. It has a very broad scope in science, engineering and social sciences. The key areas of study in mathematics are Calculus, Algebra, Geometry, Analysis, Differential Equations. Think critically. Familiarize the students with suitable tools of mathematical analysis to handle issues and problems in mathematics and related sciences. Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of mathematics and statistics. Provide students/learners sufficient knowledge and skills enabling them to undertake further studies in mathematics and its allied areas on multiple disciplines concerned with mathematics. Encourage the students to develop a range of generic skills helpful in employment, internships and social activities. Bachelor's degree in mathematics is the culmination of in-depth knowledge of algebra, calculus, geometry, differential equations and several other branches of mathematics. This also leads to the study ofrelated areas like computer science, Financial Mathematics, statistics and many more. Thus, this program helps learners in building a solid foundation for higher studies in mathematics. The skills and knowledge gained have intrinsic beauty, which also leads to proficiency in analytical reasoning. This can be utilized in modelling and solving real-life problems.

knowledge and insight of others. This helps them to learn to behave responsibly in a rapidly changing interdependent society. Students completing this programme will be able to present mathematics clearly and precisely, make vague ideas precise by formulating them in the language of mathematics, describe mathematical ideas from multiple perspectives and explain fundamental concepts of mathematics to non-mathematicians. Completion of this programme will also enable the learners to join the teaching profession in primary and secondary schools. This programme will also help students toenhance their employability for government jobs, jobs in banking, insurance and investment sectors, data analyst jobs and jobs in various other public and private enterprises.

c) M.A/ MSC

To provide a comprehensive curriculum to groom the students into qualitative scientific manpower. Mathematics is the study of quantity, structure, space and change. It has very broad scope in science, engineering and social sciences. The key areas of study in mathematics are Calculus, Algebra, Geometry, Analysis, Differential Equations. Think critically. Familiarize the students with suitable tools of mathematical analysis to handle issues and problems in mathematics and related sciences. Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of mathematics and statistics. Provide students/learners sufficient knowledge and skills enabling them to undertake further studies in mathematics and its allied areas on multiple disciplines concerned with mathematics. This programme will also help students to enhance their employability for government jobs, jobs in banking, insurance and investment sectors, data analyst, Investment Analyst, Civil services jobs and jobs in various other public and private enterprises. Enable students to enhance mathematical skills and understand the fundamental concepts of pure and applied mathematics. To provide qualitative education through effective teaching-learning processes by introducing projects, participative learning and the latest software tools. To inculcate innovative skills, teamwork, ethical practices among students to meet societal expectations. To encourage collaborative learning and application of mathematics to real-life situations. To inculcate the curiosity for mathematics in students and to prepare them for future research.

COURSE OUTCOMES

a) B.A/ B.SC/BCA COURSE

Calculus and Differential Equations: To learn basic properties of real numbers and their subsets which is the backbone of Real Analysis. To study functions in detail which is a fundamental structure in all sciences, and to be able to check continuity of a function. To be able to solve first order and first-degree differential equations.

Real Analysis and algebra: To study various types of sets and relations, and the concept of countable and uncountable. To study the concept of sequence and series and hence find the sum of infinite terms with different methods. To study the notion of lub and glb which helps to learn integrations which helps to find the area under any functions. To learn fundamental properties and mathematical tools such as closure, identity, inverse and generators. To study algebraic structure 'Groups' in detail which is useful in studyof Rings, Modules. To enhance abstract thinking of students. To learn to compare two different algebraic structures and study transfer of properties in between these structures through homomorphism and isomorphism **Complex Analysis and linear algebra**: This course will enable the students to Visualize complex numbers as points of \mathbb{R} and stereographic projection of complex plane on the Riemann sphere. Understand the significance of differentiability and analyticity of complex functions leading to the Cauchy Riemann equations. Linear Algebra This course will enable the students to Understand the concepts of vector spaces, subspaces, bases, dimension and their properties. Relate matrices and linear transformations, compute eigen values and eigen vectors of linear transformations.

Numerical Methods and Matrics: This course will enable the students to Obtain numerical solutions of algebraic and transcendental equations. Find numerical solutions of a system of linear equations and check the accuracy of the solutions. Learn about various interpolating and extrapolating methods. Solve initial and boundary value problems in differential equations using numerical methods. Apply various numerical methods in real-life problems.

Number theory,vector calculus, and logic and sets are the skill courses taught in B.Sc. In this course, students learn the properties of the set of integers in detail. Students can find integer solutions to the system of equations that arises in real-life problems. Students study various theorems on primes and also learn congruence which is used in cryptography. Find and interpret the gradient curl, divergence for a function at a given point. Interpret line, surface and volume integrals.

b) B.SC (HONS)

Calculus and Differential equations: Calculus is one of the major branches of mathematics that finds application in almost all fields of science. This course is an introduction to calculus. Students will be introduced to the Trigonometric Functions, curve tracing, applications of integration and vector functions. To exhibit the techniques for obtaining solutions to ordinary differential equations and the basic ideas and theory behind those techniques. This course will enable the students to Understand the genesis of ordinary differential equations. Learn various techniques of getting exact solutions of solvable first-order differential equations and linear differential equations of higher order. Know Picard's method of obtaining successive approximations of solutions of first-order differential equations, especially in cases when there is no method available to solve such equations. Grasp the concept of a general solution of a linear differential equation of arbitrary order and also learn a few methods to obtain the general solution of such equations. Formulate mathematical models in the form of ordinary differential equations to suggest possible solutions to the day-to-day problems arising in physical, chemical and biological disciplines.

Real Analysis, Algebra and logic and sets:

Introduction to the completeness property of real numbers, sequences and series of reals along with the cardinality of sets. Assimilate the notions of the limit of a sequence and convergence of a series of real numbers. Calculate the limit and examine the continuity of a function at a point. This course will enable the students to Understand many properties of the real line \mathbb{R} and learn to define the sequence in terms of functions from \mathbb{R} to a subset of \mathbb{R} . Recognize bounded, convergent, divergent, Cauchy and monotonicsequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence. Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers. Learn some of the properties of Riemann integrable functions. The concepts and techniques from algebra are of fundamental importance in many scientific disciplines the main objective is to introduce basic notions in algebra that are often used in

mathematics

and other sciences. The emphasis will be given to combining the abstract concepts with examples to intensify the understanding of the subject.

Theory of Real functions: This course acquaints the student with the knowledge of limits, continuity and differentiability of real-valued functions.

Group Theory (1): This course will enhance the knowledge of students with new concepts in algebra, which they have not read before.

Partial Differential Equation& System of Ordinary Differential Equation: With good knowledge of calculus, the students will learn new types of equations and their applications in the real world.

Computer Graphics: The students will use mathematical tools and contents in computers to view mathematical results more clearly.

Differential Geometry: The students are introduced to the curves in space and planes. Also, students shall be acquainted with surfaces. This course will help them in opting for courses like differential topology.

Numerical Methods: This course of Numerical Methods gives the knowledge in Statistics and numerical analysis that has a great application in the present era. Students will be capable to find roots and many non-linear equations and compute the numerical value of solutions of differential and integral equations.

Riemann integration and series of functions: Students will know integration in more general form and also will be able to compute limits of series/sequences of functions.

Ring Theory & Linear Algebra (I): Students will know the new algebraic objects, namely Rings and vector spaces and their various properties

Operating system (**LINUX**): Operating system is a vital component of computers. Students will get acquainted with one of the operating systems, namely Linux.

Multivariate Calculus: Students will be able to compute limits of functions of more than one variable. Further continuity and the concept of derivative in higher dimension will be with students as an outcome of this course

Group Theory (II): Students will learn more advanced concepts of Groups, like, Automorphism, External Direct product and Sylow theorems

Number Theory: Students will be acquainted with many interesting properties of numbers and will also help in sharpening the acumen of computation.

Analytical Geometry: Students will know more about 2 and 3-dimensional figures and also shall be capable to draw some of these.

Probability and Statistics: The students will know about different types of probability distributions and mean, mode, variance and moment generating functions of random variables in these distributions
Metric spaces and complex analysis: Students will know the generalized concept of distance and metric spaces. Also, students will be able to compute derivatives and integrals of complex-valued functions. This course will also introduce students to the concept of analytic functions.

Ring theory and Linear Algebra (II): This course is a continuation of the course RING THEORY & LINEAR ALGEBRA (I). Students will be acquainted with number theory on domains and factorization of polynomials. Also, students will know dual basis and orthonormalization.

Theory of Equations: Students will know many tools to find the solutions of equations and the system of equations.

Dissertation/Project: After this course, the student will be aware of the concepts like, a review of the literature.Each student will have more in-depth and advanced knowledge particular topic of his/her choice.

c) M.A/M.SC

Real Analysis (1): In this course students will get acquainted with open and closed sets limit points, convergent and Cauchy convergent sequences, complete spaces, compactness, connectedness, uniform continuity, etc. in a metric space. Know how completeness, continuity and other notions are generalized from the real line to metric spaces. Illustrate the effect of uniform convergence on the limit function with respect to continuity, differentiability and integrability. Recognize the difference betweenpointwise and uniform convergence of a sequence of functions. Determine the Riemann-Stieltjes integrability of a bonded function and prove a selection of theorems.

Algebra (I): After the completion of the course, Students will be able to know some standard theorems on the Jordan-Holder theorem, first, second, and third Sylow theorems. Further students will get familiar with theorems on Division algorithm and Gauss lemma and also the reducibility criteria. Moreover, students will also come to know about modules and the algebra of modules.

Topology (I): Students can know how the topology on a space is determined by the collection of open sets and closed sets or by a basis of neighborhoods at each point and know what it means fora function to be continuous. They will come to know about Hausdorff Maximality Principle, Fixed Point Theorem, Zorn's Lemma, Well Ordering Principle, The Schroder-Bernstein Theorem, cardinal number of a power set-Cantor's theorem, results based on ordinal numbers, Bases and subbases, relative topology. They shall also learn about product topology and its properties, weak topology induced by a family of maps, evaluation maps, quotient topology and its properties with real-life problems.

Ordinary Differential Equations: In this course, students shall learn the existence and uniqueness theorem for first-order differential equations, Picard's method, Linear differential equation of order 'n', Idea of linear independence and linear dependence Wronskian, Method of reduction of order, method of variation of parameters. The Cauchy-Euler Equations with application in electric problems, power series solution about ordinary points, generating functions, Rodrigue's formula, and orthogonality property of Legendre polynomials. They will also learn the method of Frobenius, solutions of Bessel's Equations, Gauss Hypergeometric differential equation and functions defined by it with some important properties, Riemann's equations, Laplace and Inverse Laplace Transform and the convolution, Sturm-Liouville Boundary value problem.

Riemannian Geometry: In this course, the students shall know of Tensor product of two Vector Spaces, Algebra of tensors, Differential manifold, Differential function, Tangent Vector, Tangent space, Vector fields, Affine connection, laws of transformations of connection coefficients. Covariant derivative, covariant differential, Torsion Tensor, Laws of Covariant derivative, Curvature tensor of an affine connexion D, properties of Riemannian Christoffel curvature tensor Bianchi's first identity and Bianchi's second identity, Ricci Lemma. They will further learn in detail about Riemannian metric, Fundamental theorem of Riemannian Geometry, Christoffel symbols of 1st and 2nd Kind and their properties, Riemannian Christoffel curvature tensor of W.R.T., Geodesic, Differential equation of a geodesic, the parallelism of a vector of constant length, Parallelism of a vector of variable magnitude, Differential parameters i.e; Gradient of a sector function, Divergence of a vector field, Curl of 1- form , Geodesic coordinate, Riemannian coordinates.

Number Theory: This course shall strengthen the basic knowledge of students in number theory where they shall know the following: Divisibility, Euclid's first theorem, Fundamental theorem of Arithmetic, Linear Diophantine Equations, Radix Representation, and Euclid's second theorem. Congruences and their properties, complete Residue System, Reduced residue System, Multiplicative function, Euler phi function, Fermat's little theorem, Euler theorem, Generalization of Fermat's theorem. Polynomial congruence, primitive roots, power residue, Quadratic residue, and quadratic nonresidue. Chinese remainder theorem, Willson's theorem, and Euler criterion. Legendre symbol and their properties, the lemma of Gauss, quadratic reciprocity law, Jacobi symbols. Greatest integer function, number-theoretic function or arithmetic functions, simple properties of T(n)(tau), $\sigma(n)(sigma)$, $\dot{O}(n)(phi)$, f(n) and F(n), mobiles function, F.martein's lemma, Mobius inversion formulae, theorem of Gauss.

Partial Differential Equations: As PDEs are finding their use in Industrial mathematics as the students need to learn the following concepts, which shall be covered under the headPDE. Partial Differential Equations, First Order Equations, Method of Characteristics for obtaining General Solution of Quasi Linear Equations. Canonical Forms of First-order Linear Equations. Methodof Separation of Variables for solving first-order partial differential equations. Classification of second-order linear equations as hyperbolic, parabolic, or elliptic. Reduction of second-order Linear Equations canonical forms. Derivation of the Heat equation, Wave equation and Laplace equation, Lagrange's method, Charpits method, and nonlinear Partial Differential Equation, the method of successive approximations, the Euler method, the modified Euler method, The Runge-Kutta method of order two and four.

Complex Trigonometry: This course is designed to make students aware of the basics of complex trigonometry. The students shall begin with an introduction to complex numbers and their properties and then find roots of complex numbers and solutions of equations by using De Moivre's theorem. They shall study the application of De Moiver's Theorem in expressing powers of sin and cosine in termsof sin and cosine of multiples of Θ (theta) and vice versa. The function of complex variables, exponential function, and logarithmic functions, Periodicity of exponential functions, trigonometrical functions of a complex variable, Euler's theorem, Circular, Hyperbolic, and Inverse circular functions of complex variables and their properties is also part of the course. Lastly, the relation between Hyperbolic and circular functions, Summation up to 'n' terms of Trigonometric series excluding hyperbolic and logarithmic functions shall also be discussed.

Real Analysis (II): This advance course of real analysis shall deal with 1. σ -algebra of sets, Measure on σ - algebra, construction of outer measures, Lebesgue outer measure on R, Regularity of Lebesgue outer measure, cantor ternary set, and Cantor function, the relation between Lebesgue measurability and Borel measurability. 2. Completion of measure space, Measurable functions, Operations with measurable functions, Continuity, and Borel Lebesgue measurability of functions on R, Integration of simple functions, Lebesgue integral of non-negative and measurable functions. Properties of Lebesgue integrals and Convergence. 3. Convergence in measure, convergence in mean, Cauchy sequence in measure, Fatou's Lemma, Lebesgue monotone convergence theorem. Lebesgue dominated the convergence theorem.

Complex Analysis (I): This course deals with stereographic projection, Differentiability, Cauchy Riemann equations, analytic functions, harmonic functions, conjugate harmonic functions, infinite series, a test of convergence, Cauchy's theorem, Cauchy's theorem for a triangle, simply connected region and two contours, Cauchy's integral formula, Morera's theorem, Liouville's theorem. Fundamental theorem of algebra. Taylor and Laurent series. They will also learn Gauss Mean Value theorem, Riemann Mapping Theorem, Schwarz Lemma, Linear, and bilinear transformations. Residues, singularities, Rouche's theorem, Evaluation of improper integrals using contour integration, infinite trigonometric integrals are also part of a course that will be beneficial for the students.

Algebra - (II): In this course, the students shall get the knowledge of the advanced study of modules where they shall learn about annihilators of modules, faithful Modules, Simple Modules, Chain conditions onmodules, Noetherian and Artinian Modules. They shall also learn of Primitive ideals, Prime radical, semi-prime ideals, Jacobson radical, Noetherian and Artinian Rings, maximum and minimum conditions with some famous Hilbert basis theorem, Nakayama lemma, Schur's lemma, and ChevalleyJacobson density theorem. Further, Free Modules, Modules over a P.I.D, sub-modules over a P.I.D, Torsion, and Torsion free Modules, Structure theorem for finitely generated modules over a P.I.D and the elementary divisor theorem are also added in this course.

Measure Theory: This course will introduce the students to the famous Riesz-representation theorem, Positive Borel Measures, Regularity properties of Borel measures Lebesgue measure on Rn Lusin's theorem, Lp – spaces, Holder's inequality, and Minkowski's inequality. Further, Completeness of Lpspaces, approximation by continuous functions, Complex measures, Lebesgue- Radon Nikodym theorem, Hahn decompositions theorem, Derivatives of measure, Symmetric derivative, maximal function Lebsegue point, Differentiation using nicely shrinking sets, Lebseguedecomposition of a Complex Borel measure on Rn, Measurability on Cartesian products, Fubini theorem for product measures, Completion of product measures, and Convolutions shall also be discussed.

Graph Theory: This course is designed to make students aware of graphs and algebra on graphs where the theory of trees, cycles, Connectivity, cut vertices, cut edge, blocks, eccentricity shall be discussed. Further, thread, laces, connectivity, and depravity shall also be studied. Planar graphs, planarembeddings, Bridges, thickness, Matrix representation of a graph, duality, eulerian and noneulerian graphs, coloring concepts, which are highly used almost everywhere with a special focus on computerscience, shall also be examined.

Relations and Functions: This course is aimed at the basic understanding of sets and relations where set operations and various kinds of relations are discussed with a special focus on permutations.

Topology – **II:** Students will come to know about connected spaces, nets, and filters. Students shall be familiar with Urysohn's lemma and Tietze extension theorem and can characterize metrizable spaces. Moreover, they shall also know about the relationship between first countable space, second countable space, separable space, and Lindeloff's space.

Functional Analysis: This course is aimed at the understanding of metric spaces, the Banach contraction Principle and its application to differential and integral equations, compactness, Arzola-Ascoli's theorem

. They shall also learn about Normed linear spaces in Banach spaces, F.Rieszs lemma, bounded linear operator, dual spaces, Complex and normed linear spaces, Inner product spaces, the Cauchy- Schwarz inequality, the Pythagorean Theorem, Hilbert spaces, Orthogonal complement and direct sum, minimizing vector theorem, projection theorem, orthonormal sets, Bessel's inequality, Orthonormal basis, the existence of orthonormal basis, Riesz representation theorem, the dimension of Hilbert spaces, Adjoint of a linear operator, self-adjoint, normal and unitary operators.

Complex Analysis (II): Students shall be well versed with properties of Harmonic functions, the maximum principle of harmonic functions, Riemann mapping theorem, Poisson's formula, Schwarz's theorem, the reflection principle, Harnack's inequality and Harnack's principle. Further, Sub harmonic Functions, solution of Dirichlet's problem, Partial fractions, meromorphic function as the ratio of two entire functions, gamma function, Jensen's theorem, Hadamard's theorem, Equicontinuity, Normality and compactness, Arzela's theorem, Germs and sheaves of analytic functions, section, and Riemann surfaces, Analytic continuation along arcs, Homotopic curves shall also be known to them.

Differential Geometry: By the end of this course, students shall know differential curves, arc length, plane curves, plane curvature, directed curvature, curvature and torsion, Frenet–serret theorem. Properties of curves such as Helix, Bertrand mate, involutes, curves on sphere, diffeomorphism, Tangent plane, unit normal vector, oriented surfaces, First fundamental form, angle between two curves, orthogonal parameterization shall also be learned. Area, curvature for surfaces, Rodrigue's formula, The Gauss map, second fundamental form. Mensnier's theorem, Gaussian curvature, Dupin indicatrix, Isometry, local isometry, Christoffel symbols, Gauss equations, MainardiCodazzi equations, Line of curvature, asymptotic line, special coordinates, Geodesic curvature, Gauss-Bonnet theorem, some application of Gauss-Bonnet theorem shall be known.

Operations Research: Since biomathematics is progressing at a rapid rate, by studying this course students shall know about Mathematical modeling concerning real-life applications, viz; Bio medical sciences, business, engineering and social science. Various modelings namely Two-Variable LP Model-Graphical LP Solution, The Simplex Method: LP Model in Equation form- Transition from Graphical to Algebraic- The Simplex Method- Artificial starting Solution-Special Cases in the Simplex method shall be known to students. Further, Duality, Transportation Model and its variants shall also be learned.

Advance Topology: By the end of this course, students shall know about: Locally compact spaces, the product of Locally compact spaces, compactification, one point compactification, Stone-Cech compactification and their properties, topologically equivalent compactification, Embedding, sufficient conditions for a compactification to be a Stone-Cech compactification, Para compact Spaces, A.H. Stone's theorem. Bounded metric, equivalent metrics, metrizable spaces, Urysohn'smetrization

theorem, Uniformities, and uniform topology, Base for uniformity, uniform continuity, product uniformity, the topology of the product uniformity is the product topology, Metrization, Metrization lemma, Metrizationtheorem.Complete uniform spaces, product of complete uniform spaces, completion, compact spaces, Bair's category theorem.

Advance Functional Analysis : This course shall contribute the following for the learning of students: Vector spaces, convex, balanced and absorbing sets, Minkowski functional, Topological vector spaces, Locally convex topological vector spaces, normable and metrizable topological vector spaces, Complete Topological vector spaces and Frechetspaces.Linear transformations a linear functionals and their continuity, Dual spaces, finite dimensional topological vector spaces, Linear Varieties and Hyperplanes, Geometric form of Hahn- Banach theorem, Uniform boundedness principle, Banach Alaogue Theorem. Extreme points and External sets Krein- Milnan'stheorem,Duality, Polar, Bipolar Theorem,Montel spaces and Schwartz spaces, Quasi completeness inverse limit and inductive limit of locally convex spaces and distributions.

Operator Theory :This course aims at the learning of Banach algebra, C* algebra, Gelfand- Mazur theorem , spectral mapping theorem, spectral radius formula, Gelfand –Naimark representation theorem, Spectral theory of operators on a Hilbert space Weak, strong and uniform operator topologies on B(H) finite rank operators, compact operators and their ideals, Integral operators, the Calkin algebras, Fredholms operators , Index of a Fredholm operator and Volterra integral operators.

Complex Dynamics : The outcome of this course is the learning/understanding of the following: Iteration of a Mobius transformation, The extended complex plane, chordal metric spherical metric ,rational maps, Lipschitz- condition, Interior and exterior of a closed curve on a sphere, conjugacy classes of rational maps, Valency of a function, fixed points, critical points, Riemann-Hurwitz relation. Equicontinuous functions, normality sets, Fatou sets and Julia Sets and related results. completely invariant sets and its properties, Attracting and repelling fixed points, Vitali's theorem, Normal families and equicontinuity, Definition of Orbit ,Properties of Julia sets, Julia sets of commuting rational functions and Derived set of the Julia set. Structure of Fatou sets, completely invariant components of the Fatou sets, Components of Fatou sets and Julia sets.

Spaces of Analytic Functions :By the end of this course, student shall know the following : Fourier transforms and its properties. Inversion theorems. Plancherel's theorem, Poisson integral, Poisson Kernel and its properties, Harnack's Theorem, Mean-Value property. Poisson integral of a measure, Boundary behaviour of Poisson integral, Approach regions, Maximal functions, Non-tangential limits, Representation theorems. Hardy Spaces over the Unit Disk, Subharmonic functions, Hardy space HP (U) in HPn(U) as a Banch space. Inner and outer functions Factorization, Cauchy integral formula. Boundary behaviour of functions in space HP (π +), Canonical factorization, HP (π +) as a Banach Space and Paley-Wiener theorem.

Algebraic Topology :This course intends to impart the education of algebraic topology. Students shall know the following: Simplicial complexes, Barycentric Subdivision, Simplicial Approximation theorem, Simplicial homology groups. Computation of Simplicial homology groups of geometric complexes, structure of zero dimensional homology groups, induced Homomorphisms of Simplicial maps, Bettinumbers.Properties of Julia sets, exceptional points, Backward orbit, Minimality property of Julia sets, Julia sets of commuting rational functions, Subdivision chain map.



12. DEPARTMENT OF PUNJABI

PROGRAM OUTCOMES

This programme shall spread the knowledge among the students about Modern as well as centuriesyears old Punjabi literature and its old Gurmukhi script. The course is meant to acquaint the students with Punjabi literature and world literature. Various papers offer in this programme include Lok sahit, Gurmatsahit, sufisahit, bhagtisahit, Bir sahit, vartaksahit, collection of short-stories, poetry, prose, fiction, plays, Feminist/ Marginals Punjabi Literature, Autobiography, Travelogue, Punjabi Diaspora, comparative literature, Punjabi Lexicography and Phonology, etc aims to enhance the literary componentand an understanding of various genres and literary ages, ability to critically analyze texts and engagein academic discussion, research and in translation.

<u>COURSE OUTCOMES</u> MIL LITERATURE COURSES

CORE COURSES

The core courses aim to enhance proficiency in the skill of listening, speaking, reading and writing. The course objective is to encourage recognition and awareness of different genres.

GENERIC COURSES

General elective courses are chosen from an unrelated discipline /subject, with an intention to seek exposure. The department offers a variety of papers in the present Generic Elective course to students whohave discipline/subject other than Punjabi.

SKILL COURSES

The skill courses offered in sem-3rd, 4th, 5th and 6th are designed to provide value-based and skill-based knowledge and aimed at providing hands-on training skills. The objective of the skill courses is to make students enlarge their skills set for greater employment.

COMMUNICATION COURSES

The purpose of this course is to introduce students to the theory, fundamentals and tools of communication and to develop them vital communication skill which should be integral to personal, social and professional interactions.

13. DEPARTMENT OF GEOGRAPHY

PROGRAM OUTCOMES

Geography is the study of places and the relationships between people and their environments. Geographers explore both the physical properties of Earth's surface and the human societies spread across it. After completing B.A/B.Sc. Programme in Geography, students will be able to

1. Knowledge outcomes:

- > Demonstrate knowledge of physical and cultural features of the earth and locate them on a map.
- > Know about the basic disciplines of Geography and its sub branches.
- Know the basic concepts and terminologies used in Geography like interior of the earth, plate tectonic, sea floor spreading, population growth, disasters, composition and structure of atmosphere, hydrosphere, etc.
- > Differentiate between weather and climate, interior of the earth, basic industries, farming etc.
- Get information about the causes and effects of local, national and international problems like global warming, acid rain, ozone depletion, soil degradation, deforestation etc.

2. Skill outcomes:

- Carry out surveying and learn the art of map making and prepare maps for the areas with the help of surveying techniques.
- Gain knowledge of quantitative methods and their ability to use statistical and cartographical methods to solve geographical problems.
- > Construct various types of projections and scales as per requirement of the study.
- > Collect primary and secondary data in the field.
- > Apply various statistical formulas to analyse data.
- > Use cartographic techniques with the help of simple software techniques like MS Excel.
- > Handle topographical and weather maps and interpret them.
- ➢ Identify types of rocks.
- ➤ Know about Geographical Information System (GIS) and Remote Sensing (RS)

COURSE OUTCOMES

Sem ester	Course Code	Course Name	Course Type	Theory/ Practica	Course Outcomes
1st	1GEOTC0101	Physical Geography	Core Course	Theory	Students will have a general understanding of physical
1st	1GEOPC0101	Physical Geography	Core Course	Practical	geographic processes.
2nd	1GEOTC0201	Human Geography	Core Course	Theory	Students will demonstrate a proficiency in knowledge of
2nd	1GEOPC0201	Human Geography	Core Course	Practical	and human geographyincluding nature-society interactions as well as global human and environmental issues.
3rd	1GEOTC0301	General Cartography	Core Course	Theory	It gives students significant opportunity to enhance their knowledge and skills of map
3rd	1GEOPC0301	General Cartography	Core Course	Practical	making and reading techniques.
3rd	1GEOSE0301	Quantitative	Skill	Theory	To introduce the students to the Technique in Geography collection, presentation of data, and to train them to use of various statistical methods.

3rd	1GEOSE0302	Advance Cartography	Skill Enhancement Courses	Theory	It gives students significant opportunity to enhance their knowledge and skills of map making and reading techniques through the use of various statistical techniques such as bar diagrams, Choropleth technique.
4th	1GEOTC0401	Environmental Geography	Core Course	Theory	It deals with Environmental Impact Assessment, Environment and disaster management. Ecology and Ecosystem.
4th	1GEOPC0401	Surveying: Handling Instruments.	Core Course	Practical	This paper deals with conducting survey by different methods and preparation of maps. Also deals with surveying by plane table and prismatic compass.
4th	1GEOSE0401	Weather Forecasting And Environmental Management	Skill Enhancement Courses	Theory	Understand the significance of weather forecasting and environmental management. Develop an idea about factors, consequences and management of earthquake, landslide, flood and riverbank erosion.
4th	1GEOSE0402	Demographic Attributes of Population	Skill Enhancement Courses	Theory	Deals with statistical factors that influence population growth or decline, but several parameters are particularly important: population size , density, age structure, birth rates, death rates, and sex ratio .
5th	1GEODE0501	Geography of Jammu And Kashmir	Discipline Specific Elective	Theory	To introduce the students to the physiographic divisions of Jammu and Kashmir, drainage

					system, climate, food and mineral resources.
5th	1GEODE0502	Regional Geography of India	Discipline Specific Elective	Theory	To introduce the students to the physiographic divisions of India, drainage system, climate, food and mineral resources.
5th	1GEODE0503	Economic & Resource Geography of The World	Discipline Specific Elective	Theory	Students will acquire an understanding of economic activities, and theories associated with it.
5th	1GEODP0501	Map Projection	Discipline Specific Elective	Practical	Deals with map projection of Zenithal, Conical and Cylindrical type. Map projections are necessary for
5th	1GEODP0502	Map Projection	Discipline Specific Elective	Practical	creating maps of the Earth or parts of the Earth that are represented on a plane such as a
5th	1GEODP0503	Map Projection	Discipline Specific Elective	Practical	screen.
5th	1GEOSE0501	Remote Sensing and GPS Based	Skill Enhancement Courses	Theory	To develop technical skills and competence in data and information acquisitions, extraction, management and analysis for mapping and visualization.
5th	1GEOSE0502	Regional Planning and Development	Skill Enhancement Courses	Theory	To make the students realize a good balance between regions to secure political stability and to stimulate the active participation of the people.
6th	1GEODE0601	Population Geography	Discipline Specific Elective	Theory	To expose the students to the spatial variations in the distribution, composition, migration and growth of population. Population regions and Policies.
6th	1GEODE0602	Geomorphology	Discipline Specific	Theory	The course will provide an understanding of the

			Elective		conceptualanddynamicaspectsoflandformdevelopment.	
6th	1GEODE0603	Development of Geography	Discipline Specific Elective	Theory	Perceive the evolution of the philosophy of Geography. Deals with development of geography in ancient, medieval and modern period.	
6th	1GEODP0601	Statistical Techniques In Geography	Discipline Specific Elective	Practical	Students understand the importance of use of data in geography. Recognize the importance and application of	
6th	1GEODP0602	Statistical Techniques In Geography	Discipline Specific Elective	Practical	Statistics in Geography Interpret statistical data for holistic understanding of	
6th	1GEODP0603	Statistical Techniques In Geography	Discipline Specific Elective	Practical	geographical phenomena. Know about different types of sampling.	
6th	1GEOSE0601	Elements and Application of GIS Techniques	Skill Enhancement Courses	Theory	To increase awareness of GIS and modeling tools for improving competition and business potential.	
6th	1GEOSE0602	Field Technique And Survey Based – Project Report	Skill Enhancement Courses	Theory	It help students the opportunity to reinforce classroom-based learning to enhance student's knowledge, skills and subject understanding.	

14. DEPARTMENT OF HISTORY

PROGRAMME OUTCOMES

History, as a subject is of great importance to all. The study of these courses will enrich the students with various historical perspectives, whereby, the students will develop the skill to evaluate the sources, methods, motivations and interpretations behind the historical narratives. This programme shall enable the students to understand the historical interpretations. The students will be able to compare, contrast and explain differences between historical accounts.

COURSE OUTCOMES

S.N o	Semeste r	Course Code	Course Title	Course Outcomes
1.	Ι	IHISTC0101	The Historyof India	The objective is to enable the students to understand the progress made by the Indian s from pre-historic times onwards.
2.	Π	IHISTC0201	The History of Indiafrom300 to1206CE	The main aim is to familiarize the students with the glorious past of India and enccourage them to study the past. The course aims at informing the students the historical facts and related areas and periods also.
3.	III	IHISTC0301	The History ofIndiafrom12 06to1707CE	To develop the knowledge and understanding about the key changes and the developments of the past and their nature are which have made the contemporary world.

4.	III	IHISSE0301	History and	The proposed course will enable the students to understand various facets of
			Tourism	heritage and their significance. The course also highlights the relation between tourism and will require visits to the heritage sites.
5.	IV	IHISTC0401	The History ofIndiafrom17 07to1950CE	To acquaint the students with the mistakes made in the past so that they can be avoided in the future. Through Movement, the students should be encouraged to respect and preserve our independence

6.	IV	IHISSE0401	An introduction to Archaeology	To familiarize the students with the basics Of Archaeology and to impart field training to them.
7.	V	IHISDE0501	History of Jammu and Kashmir(Political)from ancientt to modern times	To apprise the students about the rich historic background of Jammu and Kashmir.
8.	V	IHISDE0501	History of Jammu and Kashmir(Socio - economic,cultural) from ancient tomoderntimes	The proposed course acquaints the students with the socio-economic and cultural aspects of the history of Ja mmu and Kashmir.
9.	V	IHISSE0501	Archives and Museums	To make the students aware of the theoretical foundation of museum and archive s.
10.	VI	IHISDE0601	Europeanhist ory form1780to1945	Toacquaintthestudentswith thew main incidents, their nature, need ecologies and new institutions whichhavemadetheirimpac tin thecontemporaryworld.
11.	VI	IHISDE0602	Issues of worldhistory:2 0 th century	To acquaint the students with thew mainincidents, their nature, new ideologies and new institutions which have made their impact in the contemporary world.
12.	VI	IHISSE0601	Popularculture	The proposed course acquaints the students with the popular cultures of Jammu and Kash mir

15. DEPARTMENT OF PERSIAN

PROGRAM OUTCOMES

Language is defined as a tool for understanding and being understand and as means of communication between cultures and civilization. Thus, Learning each new language means getting aquatinted with a new culture and a new world. Knowing a new language provides one with an opportunity to get familiar with customs and traditions of people living in different part of the world, they may even discover that they possess common cultural and spiritual legacies. It is believed that a nation's literature is a perfect reflection of their social life which is depicted in their stories, poetry, allegories, plays, handicrafts and ultimately in all of their literary and social representations. Persian language and literature, being no exception, has, thanks its cultural richness long been the language of knowledge, religion and mysticism, that is what makes Persian a language, talking upon which is never outdated. A long as morality, love and friendship have not lost their lure in the world, Persian language and literature will continue to live.

COURSE OUTCOMES

S .No	Semester	Course Code	Course Title	Course Outcome
1.	Ι	1PRNTC0101	Applied Persian Grammar	To enable the students to know the grammar of the language and its uses
2.	II	1PRNTC0201	Persian Prose: Some Selection	To enable the students to read and understand the importance of Persian language
3.	III	1PRNTC0301	Persian Poetry/Introductio n to Genres	To enable the students to know the development of Persian Poetry and authors
4.	III	1PRNSE0301	Spoken Persian Language	To enable the students to read right and speak the Persian language
5.	IV	1PRNTC0401	Persian Literature Translation & Critical Analysis	To enable the students to understand the origin, development and importance of Persian History
6.	IV	1PRNSE0401	Spoken Persian Language	To enable the students to know the simple word translation, process and its technique

7.	V	1PRNDE0501	Persian Poetry/Introductio n To Genres	To enable the students to know the life and poetry of the authors of the modern Persian Literature
8.	V	1PRNSE0501	Intermediary Persian Grammar and Translation	To enable the students to know the Grammar of the Language and its uses
9.	V	0PRNGENE01	Introduction of Elementary Persian	To enable the students to know the alphabets of the language and structure formation of word and sentences
10.	VI	1PRNDE0601	Persian Prose /Introduction to Genres	To enable the students to understand the origin and development of modern trend and critical analysis of Persian Literature
11.	VI	1PRNSE0601	SpokenPersianLanguageandLiterature	To enable the students to read write and speak the Persian Language
12.	VI	0PRNGENE02	Spoken Persian Language	To enable the students to greater proficiency in speaking ,listening comprehension

16. DEPARTMENT OF DOGRI

PROGRAMME OUTCOMES

Dogri is the language of Dugger Pradesh spoken by Dogras and Dogras are known over the world as warriors and also for Pahari painting. Different courses of Dogri at UG level spread the vast knowledge among the students about the Dogra History, Dogra Culture, Folk- literature, language, Grammar and Dogri Literature.

Various papers like Gen. MIL, SEC, AECC, Dogri Literature, DSE and GE offers in this program include Dogri poetry, Short stories, Drama, Novel, Lok- Sahitya and all forms of literature aim to acquaint the students with Dogri Language and Literature and also with Indian literature. These courses enhance the literary component and an understanding of various genres and ability to cortically analyse texts and engage in academic discussion, research and translation etc.

COURSE OUTCOMES

Gen. Dogri (MIL)

S. N o	Semester	C	ourse Code	Course Title	Course Outcomes
1.	I/II	1DGRTCCC01,		DOGRI POETRY& GRAMMAR	To acquaint the students with the poetry, poet and basicGrammar.
2.	III/IV		DGRTCCC02	Dogri Short Story &Grammar	To familiarize the students with the writing of famous Dogri Short Story Writers and different aspect of Grammar.
Ab	iltyEnhanco	eme	nt Compulsory Cours	e (AECC)	
3.	I/II		DGRAE CC01 ECC	Dogri Grammar & Communicatio n	To make students understand the different aspect ofDogri Grammar and Communication
SK	ILL ENHA	NC	EMENT COURSE (SE	EC)	
4.		III	1DGLSE0301	TRANSLATIO N(Do gri)	To acquaint the students with different types and methods of Translation.
5.		IV	1DGLSE0401	Dogri La nguage Teaching	Acquaint the Students with Importance and mainaspects of Language Teaching. To acquaint the students with Dogri Language & Script.
6.		V	1DGLSE0501	News Com pilationand Writing	To familiarize the students with News, Sources ofNews, types of news and different field of News. To make them aware about the Print and Electronic Media.
7.		VI	1DGLSE0601	Creative/ Constructive Writing	To make students understand the basic concepts of Creative Wr iting To make the students understand and aware
Dog	gri Literatu	ire (Sem. I to IV)		about the various fields of writing.

8.	Ι	Dogri Poetry & Drama	To acquaint the students about the famous Dogri Poet & their poetry To acquaint the students about Dogri Drama Baba Jitto, Dramatist Prof. Ramnath Shastri and History ofDogri Drama.
9.	ΙΙ	Dogri Novel & Short Story	To acquaint the students about the Dogri Prose and Development of Dogri Short Story.

III	1DGLTC03	Dogri Gazal&	To acquaint the students with Gazal& Essay
	01	Essay	To familiarize the students with
			Gazal&EsaayWriter and their writing.
IV	1DGLTC04	Literary Criticism	To acquaint the students with the Literature
	01		and their
			different forms.
E SPECIF	IC ELECTIV	E (DSE)	
V	1DGLDE05	Duggar, Dogras	To familiarize the students with History &
	01	and their Culture	Culture ofDogras.
	DSE-1		č
V	1DGLDE05	Arts of Duggar	To acquaint the students about the different
	02	Pardesh	forms ofDogra art.
	DSE-II		
VI	1DGLDE06	Duggar da Lok-	To acquaint the students about the Dogra
	01	Jivan	Culture and different rituals of Duggar Pardesh.
	DSE-1		
VI	1DGLDE06	Renowend Dogri	To familiarize the students with renowned Dogri
	02	Writters	writers.
LECTIVE	(GE)		
V	1DGRGEN	Dogri Folk-	To acquaint the students about Dogri Folk-
	E01	:Literature	Literature.
VI	1DGRGEN	Dogri Language	To familiarize the students with Language,
	E02	& Script	origin and
			development of Dogri Language and Script.
	III IV E SPECIF V V V VI LECTIVE V VI	III1DGLTC03 01IV1DGLTC04 01IV1DGLTC04 01Z SPECIFIC ELECTIVV1DGLDE05 01 DSE-1V1DGLDE05 02 DSE-1IVI1DGLDE06 01 DSE-1VI1DGLDE06 02 LECTIVE (GE)V1DGLDE06 01 DSE-1VI1DGLDE06 01 DSE-1VI1DGLDE06 01 DSE-1VI1DGLDE06 02VI1DGLDE06 02	III1DGLTC03 01Dogri EssayGazal& EssayIV1DGLTC04 01Literary Criticism 01 E SPECIFIC ELECTIVE (DSE) V1DGLDE05 01 DSE-1Duggar, Dogras and their Culture DSE-1V1DGLDE05 02 02 02 01 DSE-1Arts of Duggar Pardesh 1000000000000000000000000000000000000

17. DEPARTMENT OF PHILOSOPHY

PROGRAM OUTCOMES

Department of Philosophy is of the major element of school of Humanities and Liberal Arts. It is offering Bachelors in Arts (B.A) as Philosophy one of the subject among other disciplines.

COURSE OUTCOMES

Philosophy is the study of the fundamental problem of the world which rests purely on Philosophical methodology. Philosophy is the base of all the humanities and social studies problems. The problem which humans face in the world today like environmental problems, ethical problems, logical problems,

can only be resolved through Philosophical methodology. No science can resolve human problem which depends upon human will and consciousness.

The courses which Philosophy program offers for B.A students have following results

- 1. These courses helps humans to develop reasoning, consciousness and decision making
- 2. These course could help them to study human behaviour
- 3. These course help them in employment to work as teachers, counselors and supervisors.
- 3. These courses help them in working in company as an ethical officer

4. These courses could help students in developing moral consciousness which indefinitely assit them in future life.

5. These courses help them to deal with environmental problems, academic problems, moral Dilemmas and decision making.

18. DEPARTMENT OF ENVIRONMENTAL SCIENCES

PROGRAM OUTCOMES

COURSE: SEMESTER-1st and 2nd (Environmental Sciences)

This programme will help the students to understand, how environmental science originated as a separate discipline. This course will introduce the students to environmental laws and treaties. This course helps students to understand various problems related to environment such as pollution, disaster, over exploitation of natural resources and their management. The subject will prepare the students about the scope of environment, research measures aptitude and opinions in the areas of environment.

S.	Semester	Course Code	Course Title	Course Outcomes
No.				
1.	1st and 2 nd	0EVSAECC01	Environmental	To enable the student to understand
			sciences	the basic concepts, importance of
				environment and ecosystem.
				To acquaint the student to know
				about environmental pollution and
				disaster management.

		To make the students understand the		
		environmental treaties, laws and		
		ethics and management of natural		
		resources		

19. Department of Computer Science

Programmes offered: 1. Bachelor of Computer Application

2. Bachelor of Science

PROGRAMME OUTCOMES:

The present Learning Outcome-based Curriculum Framework for Bachelor's Degree in Computer Science is intended to facilitate the students to achieve the following.

• To develop an understanding and knowledge of the basic theory of Computer Science and Information Technology with a good foundation on theory, systems and applications such as algorithms, data structures, data handling, data communication and computation.

• To develop the ability to use this knowledge to analyze new situations.

• To acquire necessary and state-of-the-art skills to take up industry challenges. The objectives and outcomes are carefully designed to suit the above-mentioned purpose.

• The ability to synthesize the acquired knowledge, understanding, and experience for a better and improved comprehension of the real-life problems

• To learn skills and tools like mathematics, statistics, physics, and electronics to find the solution, interpret the results, and make predictions for future developments.

<u> </u>	
FUNDAMENTALS AND	• To bridge the fundamental concepts of computers with the present
OFFICE TOOLS	level of knowledge of the students
(1BCATC0101)	• Familiarize Operating Systems, Programming
	Languages, Peripheral Devices, Networking,
	Multimedia, and the Internet.
INTRODUCTION TO	• Develop skills in the implementation and applications of data
PROGRAMMING PARA-	structures.
DIGMS AND C	• Implementation of basic algorithms for operations on arrays,
(1BCATC0102)	linked list, stacks, queues, trees.

Courses Offered:

a)Bachelor of Computer Application

COMPUTER FUNDA-	• Hands-on experience on MS-suite.
MENTALS AND OFFICE	• Ability to work with textual information, characters, and strings.
TOOLS & INTRODUC-	• Ability to work with arrays of complex objects.
TION TO PROGRAM-	
MING PARADIGMS AND	
C LANGUAGE	
(<u>1BCAPC0101</u>)	
DIFFERENTICAL CAL-	• The student should have a good mathematical background and
CULUS	have knowledge of topics like limits, differentiation and integra-
<u>(1MATTC0101</u>)	tion. This course will help the student to strengthen his mathemat-
	ical concepts.
COMPUTER SYSTEM	• To understand and examine the structure of various number sys-
ARCHITECTURE	tems and their applications in digital design.
(1BCATC0201)	• The ability to understand, analyze and design various combina-
	tional and sequential circuits.
	To demonstrate computer architecture concepts related to the design
	of modern processors, memories, and IO.
C++ AND OBJECT ORI-	• To understand how C++ improves C with object oriented features.
ENTED PROGRAMMING	• To learn how to write inline functions for efficiency and perfor-
(1BCATC0202)	mance.
OBJECT ORIENTED	• To implement concepts like polymorphism class inheritance
PROGRAMMING IN C++	virtual functions constructor and destructor friend functions vir-
(Practical)	tual functions, and abstract classes, etc.
(1BCAPC0201)	
DIFFERENTIAL EQUA-	• This course is of Differential equation. Student should have pre-
TIONS	requisite knowledge of differential equations especially variable
(1MATTC0201)	separable method homogenous and linear differential equations
DATA STRUCTURES	• Develop skills in the implementation and applications of data
AND FILE PROCESSING	structures
(1BCATC0301)	structures.
NETWORKING AND IN-	• To obtain a theoretical understanding of data communications and
TERNET	computer networks
(1BCATC0302)	computer networks.
DATA STRUCTURES	• Gaining practical experience in installation monitoring trouble.
AND FILE PROCESSING	shooting of the current I AN systems
& COMPLITER NET-	• Develop skills in the implementation and applications of data
WORKS(Practical)	• Develop skins in the implementation and applications of data structures
(1BCAPC0301)	su uctures.
PC ASSEMBLING AND	• To be able to assemble/setup and upgrade personal computer sys
TROUBLE SHOOTING	tems. To diagnose and isolate faulty components
(1BCASE0301)	• To optimize system performance and install/connect peripherals
PROGRAMMING IN	• To design and implement programs that make strong use of the
	• To design and implement programs that make strong use of the
(1BCASE0302)	classes alle objects.
DATABASE MANAGE	• To understand terms related to database design and management
MENT SVSTEM	• To understand terms related to database design and management.
(1BCATC0401)	• To understand the objectives of data and information manage-
	The understand the nelicies for the deliver deally dealers
(1DCATCO402)	• 10 understand the policies for scheduling, deadlocks, memory
(1BCA1C0402)	management, synchronization, system calls, and file systems.

DATABASE MANAGE- MENT SYSTEMS & OP- ERATING SYSTEMS (Practical) (1BCAPC0401)	 To learn how to manage a relational database management system (RDBMS). To implement various internal and external commands.
SOFTWARE ENGINEER- ING (1BCASE0401)	 Basic knowledge and understanding of the analysis and design of complex systems. Ability to apply software engineering principles and techniques.

20.DEPARTMENT OF COMMERCE

MARKETING MANGEMENT

PROGRAM OUTCOMES

PSO1: Understand the basic concepts in Marketing, Marketing environment and develop an understanding about communication, Marketing Communication and its usage

PSO2: Understand the various types of Advertising, its applications and its usage with effect to marketing scenario, Role of advertising on the global marketing, usage of advertising campaign and estimation of advertising budget.

PSO3: Analyses the critical aspects of ad-agency ,explaining the history of ad-agency, understand the applicability of advertising media, media planning, media scheduling, and evaluation of adverting effectiveness.

PSO4: Analyse the importance of personal selling and salesmanship, process of effective selling and involment of salesmen in sales organization.

PSO5: Development and usage of management of sales force, methodology for Recruitment, selection, training, motivational and moral of sales force activity.

PSO6(a): Develop an understanding about various aspects of Enterprenuership , its usage and applicability of market survey and its techniques

PSO6(b): Developing a brief knowledge about Service marketing , its marketing mix and howpeoples importance in service marketing

PSO7: Development and usage Nature and growing importance of sales promotion, samples and point of purchases, implementing and evaluating the sales promotion programs, importance of public relations, corporate image building. P.

The Bachelor of Arts in (BA)Marketing Management program provides full-time intensive study for students wishing to earn a business degree. The BA in Marketing Management degree produces graduates who bring contemporary applied marketing skills and sound business management acumen

to their organizations, helping them to succeed in a dynamic global economy. The program includes intensive applied business training with an emphasis on marketing management, as well as new and emerging media and marketing analytics. The practical learning outcomes are grounded in curriculum that is accountable, global, team-based and uses contemporary quantitative and qualitative tools. This degree is an appropriate goal for individuals who aspire to acquire leadership positions in the marketing profession.

Graduates acquire the following:

- Skills necessary to conduct business activities using contemporary social media applications.
- Ability to analyze quantitative and qualitative information using contemporary web tools to facilitate informed marketing decision making strategies.
- Critical thinking and problem-solving skills by assessing and interpreting source materials, evaluating arguments, examining and applying both case-based and real-world business-based projects, as consulting teams in the development of business and marketing plan solutions.
- Skills to manage communication initiatives to create and implement marketing plans that achieve organizational goals.
- Professional and persuasive communications skills through a variety of media (traditional, emerging, and technology driven).
- Skills required to develop creative media objectives, strategies and tactics to reach key target markets across all media and communication options and platforms.
- An understanding of the entire organization, and the important role of corporate citizenship.
- Collaboration skills with all functional areas of an organization (accounting, human resources, operations, production, marketing, sales etc.).
- Skills necessary to work effectively in teams, assuming roles of leader and follower, as appropriate.
- A better understanding of human society and how to contribute to it through liberal education studies
- Skills to manage communication initiatives to create and implement marketing plans that achieve organizational goals.
- Professional and persuasive communications skills through a variety of media (traditional, emerging, and technology driven).
- Skills required to develop creative media objectives, strategies and tactics to reach key target markets across all media and communication options and platforms.
- An understanding of the entire organization, and the important role of corporate citizenship.
- Collaboration skills with all functional areas of an organization (accounting, human resources, operations, production, marketing, sales etc.).
- Skills necessary to work effectively in teams, assuming roles of leader and follower, as appropriate.
- A better understanding of human society and how to contribute to it through liberal education studies.
- Quantitative business skills.

COURSE OUTCOMES.

S.NO	SEM COURSE CODE) SEI	COURSE NAME	COURSETYPE	CREDIT	COURSE OUT- COMES
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1 1ST	1MMGTC0101	PRINCIPLES OF MARKETING	CORE COURSE	6	This course aims to fa- miliarize students with the marketing function in organizations. It will equip the students withan understanding of the Marketing Mix elements and sensitize them to cer- tain emerging issues in Marketing. The course will use and focus on In- Indian experiences, ap- proaches and cases
2 2 nd	1MMGTC0201	ADVERTISING AND SALES PRO- MOTION	CORE COURSE	6	 Explaining the con- cept of Advertising, Marketing Characteristics. Elaborating theOrigin andGrowth of advertising, Objectivesof advertising. Highlighting the differences be-tween Advertis-ing Vs. Market-ing, AdvertisingVs. Communication. Describe the Importance of advertising in Mod-

3	3 rd	1MMGTC0301	SALES MANGE- MENT	CORE COURSE	6	This is a comprehensive course in sales manage- ment principles and methods featuring alloca-tion of priorities to the company's sales objec- tives and responsibilities; formulation of sales pol- icy; tasks of planning, or- ganizing, staffing, and controlling the work of the field sales force. Un- derstanding the human dynamic in managing salespeople and discuss- ing some of the opportunities and challenges that sales managers face in

						their day-to-day work. Discussing the role of sales management in the broader corporate envi- ronment and the career opportunities that are available working in the sales and sales manage- ment functions. The course also reinforces the need for sales managers to display strong ethical behaviour with custom- ers and employees alike.
4	3 rd	1MMGSE0301	TOURISM AND HOSPITALITY SERVICES	SKILL Enhance- ment COURSE	4	the student should beable to: Apply the con- cepts and skills necessary to achieve guest sat-isfaction. Conduct him/her-self in a profes- sional and ethicalmanner, and practice industry- defined work eth-ics. Demonstrate introductory knowledge of Indian and mul-ticultural perspectives to meetthe needs of guests and em- ployees. Demonstrate ability to performbasic and super- visory level iob functions

						in travel and tour- ism careers.
5	3rd	1MMGSE0302	CUSTOMER RELA- TIONSHIP MAR- KETING	SKILL EN- HANCEMENT COURSE	4	On completion of this course, the students will be able to

			CO1. Understand
			the basic concepts
			of Cus- tomer
			relationship man-
			agement.
			CO2. To
			understand
			marketing
			aspects of
			Customer
			relationship
			management.
			CO3. Learn basics
			of analytical
			Customer rela-
			tionship
			management.
			CO4. Understand
			basics of operational
			Customer
			relationship
			management.

4 th	1MMGTC0401	CONSUMER BE- HAVIOUR	CORE COURSE	6	• Upon successful completion, stu-dents wil have the knowledge and skills to:
					 Identify the major influences in con- sume behavior Distinguish be- tweed different consumer behav- iou influences and their relation-ship Establish the rele-vance of con- sume behaviour theories and con- cepts the market- ing decisions Implement appro- priat combinations of theories and concepts Recognise social an ethical implications of consumer behaviour Use mos appropriate techniques tapply markets solutions

4 th	1MMGSE0401	E COMMERCE	SKILL EN-	4	Upon
			HANCEMENT		completionof
					the course stu
					dents should
					be able to:
					• Analyze the
					im-pact of E
					com- merce
					on busi- ness
					models and strategy
					 Describe the
					ma-ior types
					of E-
					commerce.
					• Explain the
					pro-cess that
					shouldbe
					followed in
					E commerce
					pres-ence
					Identify the
					key security
					threats in the
					E-commerce
					environment
					Describe ho
					procurement
					andsupply
					late to R2R
					F-
					commerce

8	4th	1MMGSE0402	BUSINESS ETHICS	SKILL EN- HANCEMENT	4	Students will be able to understand the businessethics. • The student will be able to Ana- lyze corporate so- cial Responsibil- ity. • The student will be able to ana- lyze various ethi- cal codes in cor- porate • governance • Student will beable to Analyzethe Employees conditions and Business Ethics
9	5 th	1MMGDE0501	ADVERTISING AND BRAND MANGEMENT	DISCIPLINE SPECIFIC	6	At the end of the course, students should be ableto:

			 To understand the nature, role, and importance of brand manage-ment and adver- tising in market- ing strategy To understand ef-fective design and implementa- tion of advertis- ing strategies To present a gen-eral understand- ing of content, structure, and ap-peal of advertise- ments To understand ethical challenges related to respon-sible manage- ment of advertis- ing and brand strategy
	 <u> </u>		strategy

10	5 th	1MMGDE0502	PERSONAL SELLLING AND SALES FORCE MANAGEMENT	DISCIPLINE SPECIFIC	6	 Recognize different types of personal selling. Describe the stages in the personal selling pro-cess. Specify the functionsand tasks in the sales management process. Determine whether a firm should use manufacturer's repre- sentatives or a companysales force and the number ofpeople needed in a company's sales force. Understand how firms recruit, select, train, mo-tivate, compensate, and evalu-ate salespeople. Describe recent appli-cations of sales force
12	5 th	1MMGSE0502	IT SKILLS FOR	SKILL EN- HANCEMENT	4	Outcomes:

					Demonstrate a basic understand- ing of computer hardware and software. Demonstrat e problem- solving skills. Apply logical skills to program- ming in a variety of languages. Utilize web tech- nologies. Present conclu- sions effectively, orally, and in writing. Demonstrate basic understand- ing of network principles. Working effec-tively in teams. Apply the skills that are the focus of this program
--	--	--	--	--	---
13 6 ^t		MADKETING OF	DISCIPLINE	6	• At the and of
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13 6 th	1MMGDE0601	MARKETING OF SERVICES	DISCIPLINE SPECIFIC	6	 At the end of thiscourse, students would be able to: Understand the Concept of Ser- vices and intangible products Discuss the rele- vance of the services Industry to Industry. Examine the characteristi cs of the services industry and the modus operandi. Analyse the role and relevance of Quality in Services

						•	Visualise future changes in the Services Industry
14	6 th	1MMGDE0602	RETAIL MANGE- MENT	DISCIPLINE SPECFIC	6	•	Understand the functions of retail business and vari- ous retail formats and retail channels. Understand thedifference be-tween Retail and Manufacturing Supply Chain Understand, key drivers of retail supply chain and how to select a re- tail store location? Analyze Retail Market and Fi- nancial Strategy including product pricing. Integrate the vari- ous Supply Chain partners and how to collaborate with them?

15	6 th	1MMGSE0601	COMMUNICATION SKILLS	SKILL EN- HANCEMENT	4	Upon completion of thecourse, students are ex-pected to be able to demonstrate a good un- derstanding of: • effective business writing • effective business communicatio ns • research ap- proaches and in- formation collec- tion • developing and delivering effective presentations • effective

						 skills that maxim- ise team effec- tiveness good time man- agement effective problem solving
16	6 th	1MMGSE0602	INTERNATIONAL TRADE	SKILL EN- HANCEMENT	4	At the end of the mod- ule, the student should be able to : • Identify benefits and limitations of how global mar-kets work • Use relevant eco- nomic principles to articulate in- sights into policy issues of rele- vance to business management worldwide

BUSINESS MANAGEMENT

PROGRAM OUTCOMES

Program Outcome (PO) 1: Management graduates should be able to comprehend, organize and solve complex business problems using the resources available at their discretion.

Program Outcome (PO) 2: Management graduates should create, select and apply advanced technolo- gies related to the latest management and information technology tools with quantitative and qualitativetechniques to solve business-related issues.

Program Outcome (PO) 3: Management graduates should be able to apply their viewpoint in the man-agement field of study to develop fully motivated opinions on contemporary issues such as the need for innovation, integrity, leadership and change management, globalization and technology manage- ment.

Program Outcome (PO) 4: Management graduates should improve the entrepreneurial ability to provide innovative solutions to the need of humanity.

Program Outcome (PO) 5: Management graduates should analyze the environmental, social, political, technological, environmental, health, safety, sustainability and legal context of business.

Program Outcome (PO) 6: Management graduates should able to communicate effectively with society and they should able to comprehend and write effective reports & present properly. Program Outcome (PO) 7: Management graduates should focus on team bonding & value-based lead-ership ability.

Program Outcome (PO) 8: Management graduates should have the ability to work intelligently, individually and as a team, using techniques such as case analysis, projects and assignments.

Program Outcome (PO) 9: Management graduates should evaluate and integrate ethical considerations into decision-making.

S.	SEM	COURSE	COURS	COURSE NAME	CREDIT	COURSE OUTCOMES
Ν		CODE	E TYPE		S	
0	ICT	1PMCTC0	CODE	DDINCIDLES OF	6	CO1. Understand the concents
1	151	101	CORE	PRINCIPLES OF MANAGEMENT	0	related to Business
		101				
						CO2: Demonstrate the roles,
						management.
						of PPM knowledge to diagnose and
						solve organizational problems and
						develop optimalmanagerial decisions.
						CO4: Understand the complexities
						associated with management of
						human resources in the organizations
						and integrate the learning in handling
2	2ND	1BMGTC0	CORE	HUMAN	6	This course is mainly oriented towards
		201		RESOURCE		professional augmentation taking Place
				MANGEMENT		in the global as well as domestic
						business arenaand the curriculum thus
						intends to reduce the gap between
						industry and academia, with the right
						blend of theory and practice, furthering
						students to nurture their talent for
						becominggood leaders and assets for an
						depth knowledge and analytical skills
						which will enable them to effectively
						and efficiently carry outvarious human
						resource and organizational
						development operations of an
						organization in the emerging
						globalized
						environment.
3	3RD	1BMGTC0	CORE	LEGAL ASPECTS	6	Law and legal institutions play a major
		301		OF BUSINESS		role in the conduct of business. The
						purposes of laws relating to business in
						India are mainlytwofold: To create an
						environment conducive to the growth
						of business; and to make sure that
						business operates within the
						the

 5.	4TH	1BMGTC0	CORE	FINANCIAL	6	•	CO1. Demonstrate the applicability
		401	COURS	MANAGEMENT			of the concept of Financial
			Е				Management to understand the
							managerial Decisions and Corporate
							Capital Structure
						•	CO2. Apply the Leverage and EBIT
							EPS Analysis associate with
							Financial Data in the corporate

						 CO3. Analyse the complexities associ- ated with management of cost of funds in the capital Structure CO4. Demonstrate how the concepts of financial management and investment, financing and dividend policy decisions could integrate while identification and resolution of problems pertaining to LSCM Sector CO5. Demonstrate how risk is assessed
	4TH	1BMGSE04 01	SKILL ENHAN CEMEN T COURS E	STATISTICS FOR BUSINESS DECISIONS	4	 To familiarize the students with various Statistical Data Analysis tools that can beused for effective decision making. Em-phasis will be on the application of the concepts learnt to various managerial sit-uations. Summarize data sets using Descriptive statistics. Analyze the relationship between two variables of various managerial situa-tions. Geometrically Interpret Correlation and Regression Develop managerial decision problems using Probability Density Functions and Cumulative Density Functions
	4TH	1BMGSE04 02	SKILL ENHAN CEMEN T COURS E	PERSONALITY DEVELOPMENT AND COMMUNICATI ON SKILLS	4	 Developing the effective communication skills among students. Inculcating the soft skills in theoretical and practical ways. Learning about the essential factors for personality development and bringing them into practice. Create understanding of the nonverbal forms of communication. : Involving students in adapting the tech-niques of personality development.

5TH 1BMGDE0 DISCIPL BUSINESS 6 • Develop the critical thinking needed to perform external internal analyses of organiza and their com-petitive environm 501 INE SPECIFI STRATEGY • Develop the critical thinking needed to perform external internal analyses of organiza and their com-petitive environm C C COURS E • Develop business landsca mapping strategies • Demonstrate the ability to appl management tools required analyze • Demonstrate the ability to appl management tools required analyze						
	5TH	1BMGDE0 501	DISCIPL INE SPECIFI C COURS E	BUSINESS POLICY AND STRATEGY	6	 Develop the critical thinking skills needed to perform external and internal analyses of organizations and their com-petitive environment. Develop business landscaping mapping strategies Demonstrate the ability to apply the management tools required and analyze

						 the data generated from the tools to as- certain organizational performance. Demonstrate the ability to develop global strategy formulation as part of a strategic management process compris- ing the three phases: diagnosis, formula- tion, and implementation.
	5th	1BMGDE0 502	DISCIPL INE SPECIFI C COURS E	BUSINESS COMMUNICATI ON SKILLS	6	 To understand and demonstrate writing and speaking processes through inven- tion, organization, drafting, revision, ed- iting, and presentation. To understand the importance of speci- fying audience and purpose and to select appropriate communication choices.: To understand and appropriately apply modes of expression, i.e., descriptive, expositive, narrative, scientific, and self- expressive, in written, visual, and oral communication. To participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding. To understand and apply basic principles of critical thinking, problem solv- ing, and technical proficiency in the de-velopment of exposition and argument. Objective 6: To develop the ability to re-search and write a documented paper and/or to give an oral presentation

01	5TH	1BMGSE05 02	SKILL ENHAN CEMEN T COURS E	EVENT MANGEMENT	4	 CO1: Analyze the role of events in imagebuilding CO2: Explain all the steps of planning and organizing an event CO3: Plan and organize events CO4: Discuss ways of strategic market- ing and media planning for events CO5: Demonstrate knowledge and abil- ity to identify risk areas, evaluate safety measures CO6: Demonstrate knowledge and abil- ity to review, analyze events and relate to case studies

11	6 TH	1BMGDE0 601	DISCIPL INE SPECIFI C COURS E	FINANCIAL INSTITUTIONS AND MARKETS	 To introduce students to the world of financial services To enrich student's understanding of the fundamental concepts and working of financial service institutions To equip students with the knowledge and skills necessary to become employa-ble in the financial service industry.
12	6TH	1BMGDE0 602	DISCIPL INE SPECIFI C COURS E	INTERNATIONA L FINANCE	 Demonstrate basic understanding of for- eign exchange market and exchange rates • Demonstrate basic understandingof how to use foreign exchange deriva- tives and other techniques to manage for- eign exchange exposures of firms. Demonstrate basic understanding of the issues pertaining to multinational fi- nancing and investment decisions Demonstrate critical and analytical skills wherein they should be able to make sense out of a mass of information to address relevant issues pertaining to international finance
13	6TH	1BMGSE06 01	SKILL ENHAN CEMEN T COURS E	COUNSELING AND NEGOTIATION SKILLS FOR MANAGERS	 The objective of this course is to provide insights into handling behavioural issues at work place by developing counselling skills. It is also intended to facilitate an understanding of the structure and dy namics of negotiation. Understand complex theory and practice of negotiation in particular and conflict resolution in general. Identify the challenges we all have in dealing with negotiation and conflict resolution. Apply negotiation as a system and the important role of subsidiary factors.

14	6TH	1BMGSE06	SKILL	TALENT AND	•	To prepare students for talent and
		02	ENHAN	KNOWLEDGE		knowledge management efforts in
			CEMEN	MANGEMENT		or-ganisations. It aims at enabling
			Т			students to gain insights in concepts
			COURS			and applica- tion of talent and
			COURS			knowledge manage- ment in
			E			organizations. The course aims at
						understanding basic elements, pro-
						cesses, approaches and strategies of
						managing talent and knowledge in
						or- ganisations.
					•	After completion of the course
						students shall be able to:

						• 1. Evaluate the potential and appropri- ateness of talent development strategies, policies and methods with reference to relevant contextual factors. 2. Assess therole and influence the politics of knowledge management policy and practice in a range of contexts
15 1	6 th	BMGGENE O1	GENERI C COURS E	STRESS MANAGEMENT	6	 Assess and analyze the symptoms, causes and effects of personal and aca- demic stressors in order to implement ap- propriate stress management tech- niques. Monitor effectiveness of stress manage- ment techniques and revise to meet cur- rent needs.
16	6th	BMGGENE 02	GENERI C COURS E	ENTREPRENEUR SHIP	6	 This course provides the students with anin-depth understanding of key concepts in entrepreneurship and business devel- opment. It will cover the different types of entrepreneur here – social, serial and lifestyle. The course addresses the theo- ries and techniques applied to business development - new business formation (measuring start-up activity, new entre- preneurs and social networks), business growth and sustainability. Students learn about finance and small business and de-velopment strategies designed to de- velop business and businesses.
						•

22. DEPARTMENT OF URDU

PROGRAM OUTCOMES

Programs Specific Outcomes (PSOs): The course will make the students enable to self learn and writevarious types of literary works and prepare the research paper for Seminar and understand the Importance Urdu Literature. And also his/her self confidence level will boost up and he/she will be able to emerge as a good writer and good human Being.

The main objective of Urdu and Persian course is i) To develop research abilities among the students and to train students for research methodology so that he/she can pursue Ph.D. research in a systematic manner

ii) To familiarize them with practical criticism so that their research does not become a mere enumeration of facts but exhibits an exercise of the faculties of critical appreciation and evaluation of literary works. The course aspirants need to study theory as well as practical subjects. Apart from this, candidates also need to conduct research and present their research findings. The course will increase students' knowledge about Urdu language and well-known Urdu literature. One main purpose of Urducourse is to provide students knowledge at international level about Urdu and its literature. To introducelevels of criticisms from ancient to modern times of Urdu literature. To aware students about the importance of Urdu literature and its vastness.

PS01- Students will pursue research degrees like M.Phil. and Ph.D.

PS02- Students will perform in the fields such as teaching, publishing, scriptwriting, translations, journalisms, mediaproductions, documenting, reporting, producing documentaries etc.

PS03- Students will be able to think and write creatively and critically and will be able to interpret anypiece of writing.

PS04- Students will develop communication and employability skills that give them professional outlook for better performance.

PS05- To create the ability of understanding about different forms of literature among the various types of prose and Poetry. Students would be able to develop thoughts provoking and analytical abilities.

Programme Outcomes (POs):

PO1 - Students will be able to analyse the evolution of Urdu and Persian Literature and the growth of the popular genres in terms of social, political, historical, national, cultural and literary backgrounds.

PO2 - Student would be informed about the famous poets of Jammu and Kashmir and their contribution in Development of Urdu

PO3 - Students will become capable of interpreting and exploring relationships from the points of viewof different people.

PO4 - Students would be able to increase the vocabulary of the new languages.

PO5 - Students will understand the formation of language and its development system from time to time.

PO6 - To improve the skill of correct speaking and writing of Urdu in Students.

PO7 - Students will be able to apply their understanding of the various types of literary criticism in the interpretation and appreciation of a literary work.

PO8 - Students will get inspired through the study of fiction and poetry that make them openminded and inspire them to develop emotional quotient (EQ) allowing them to perceive the world through other's eyes as well to foster intercultural dialogue.

PO9 - Students will learn to appreciate Indian literature in Urdu and Persian and explore its uniquenessand its place among the literatures in Urdu and Persian.

PO10 - Students will learn what language is and what does itconsist of through the study of literary texts written across the different space and time.

PO11 - Students of Urdu and Persian literature program will develop skills that are highly valued by employers, including critical thinking skills and strong writing skills which make them employable inawiderangeof professions such teaching,publishing,scriptwriting,translations,journalisms,mediaproductions,document ing, reporting, producing documentaries etc.

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Course Outcomes (Cos)

CO1 - Course on Urdu and Persian Literature will provide a comprehensive knowledge of Urdu and Persian literature and language.

CO2 - To promote And Cultivate SELF-STUDY ability in students.

CO3 - Course on Urdu and Persian Literature will enhance critical thinking, analytical thinking and linguistic competence.

CO4 - Course on Urdu and Persian Literature will develop skills like Reading, Writing and Oral communication skills along with command over Literary Urdu and Persian language.

CO5 - Course on Urdu Literature will enhance the sense of Genres of literature, Cultural History, Critical Approaches and Research.

23.DEPARTMENT OF SANSKRIT

PROGRAMME OUTCOMES

The curriculum of B.A. with Sanskrit is multi-disciplinary and inter-disciplinary in nature. The coursestaught in B.A. are drawn from ancient Sanskrit literature and modern prose Sanskrit literature. The courses also lav importance to both hard and soft skills. Of Sanskrit. Broadly the

outcomes of the Programmes are as follows:

PO1 : The students would able to understand the secrets Sanskrit literature

PO2:Provide adequate knowledge of Sanskrit language which enables students to understand Sanskritenvironmental national and global scenario

PO3 :The program would provide the critical reasoning, understanding Sanskrit literature and have capacity analysis of key features and concepts of various commentaries in the discipline.

PO4 :Gain competencies and professional skills for teaching and conducting research in various fields in Sanskrit Grammar, Classical Sanskrit Literature, Vedic Literature and ancient Indian philosophy.

PO5 :The students would be able to understand societies and multi-dimensional application of Sanskritlanguage

PO6 :Understanding ancient scriptures written in Sanskrit, Pali & Prakrit.

PO7 : Inculcating in students social responsibility through Sanskrit literature student becomes responsible citizen of nation

COURES OUTCOMES:

CO1: Students would be able to acknowledge the literary riches of their all time great Classical Sanskrit drama. CO2 : Students would be able to interpret the Vedic text by the help of these etymologies

. CO3 : Students would be able to translate in two different styles, & they will be introduced in SanskritMelody.

CO4 : Students would be able to live the desirable ideals in modern age through the study of

Ramayana.CO5 : Students would be able to understand the Sanskrit language properly.

CO6 : Students would be able to learn the inner structure of Sanskrit drama by themselves.

CO7 : Students would be able to know the original source of later developments in ornate poetry.

CO8 : Students would be able to evaluate any Sanskrit drama with the help of Rasa- theory of BharatMuni & will be able to pick up any flaws in poetry if present.

CO9 : Students would be able to write an essay in Sanskrit, & their language-skill will be

developed.CO10 : - Students would be able to understand the glorious cultural heritage of

India.

CO11: - Students would be able to understand the system of Traditional grammar

24. Department of Statistics

PROGRAMME OUTCOMES:

The Courses in the Department of Statistics will enable the student

• to develop the skills to analyse complex statistical data coming from the various fields like industry,marketing, finance, agriculture and business.

- to implement data analysis strategies to develop efficient models for various theoretical postulations.
- understand the intricacies of statistical testing and its applications in real life problems
- to develop, design and analyse experiments in empirical research.
- to develop soft skills and practicing professional ethics.
- analyse very large data sets in the context of real-world problems and interpret results using dataanalytics.
- understand the optimization and computational techniques for the solution of the real-life problems.

COURSE OUTCOMES:

Each course, in all the Programmes, has been designed and kept in accordance with the instructions of UGC and fulfills the requirements of the academic and industrial needs. By opting these courses students may be able to qualify the various esteemed competitive examinations like CSIR-NET, UGC-NET, GATE, ISS, IAS, PCS and many others. These programmes offered by the department are highly employable and enable the students to take positions in various Institutes/Universities/Industries for research and development and serve the society.

Program Specific Outcome: The courses in the Department are designed to inculcate analytic and decision-making aptitude among the students. Having an advanced and upgraded knowledge of Statistics from both the theoretical and practical aspects, the students who pass out are well equipped in managing and analysing various types of data.

The education imparted in Statistics is aimed to inculcate statistical thinking in young minds for better future planning and welfare of society and to contribute to the society through excellence in statistical education and research. Students after completing these courses may be able to start their career with various Academia and Industry Interface. It may provide a platform to all the students to get experiential learning in this material world. The students may also able to develop decision making problems and suggest the best solution to attain the decision in R&D sector jobs.







