

Course Outcomes:

B.A. I

Subject: English Literature

Semester I –British Literature from 1340-1750 ELT101

On studying this paper, the student will be able to:

1. Understand the development of British literature from the beginning to the Age of Pope.
2. Aware of different trends and movements of the period
3. Appreciate and analyze the select literary poems, plays, and prose pieces in a larger socio-cultural context.
4. Develop presentation skills and face viva voce.

Semester II- British Literature from 1750-1890) ELT201 On

studying this paper, the student will be able to:

1. Understand the development of British literature from 1750 – 1890
2. Aware the students about different trends and movements of the period
3. Develop fundamental skills required for close reading and critical thinking of the texts and concepts.
4. To develop presentation skills and face viva voce.

B.A. II

Subject: English Literature

Paper I: Modern English Literature

BAIEG-A

On studying this paper, the student will be able to:

1. Acquire familiarity with a wide range of literary terms and categories relating to literary history, theory and criticism, including figurative language and prosody.
2. Develop proficiency in oral communication and writing.
3. Identify, analyse, interpret and describe the critical ideas, values and themes that appear in literary and cultural texts and understand the way these ideas, values and themes inform and impact culture and society.
4. Apply theoretical approaches to critical reading of literary texts.

Paper II Modern English Literature BAIIIEG-B

On studying this paper, the student will be able to:

1. Acquire knowledge of the literary works of the eighteenth century.
2. Interpret and analyse the literary texts prescribed.
3. Recognize the connection between the literary periods and the texts.
4. Improve the writing skills and oral communication skills.

B.A. Part: III

Subject: - English Literature

Paper I: Indian Writing in English BAIIEG-A

On studying this paper, the student will be able to:

1. Develop the critical understanding of literature.
2. Acquire knowledge and acquaintance to Indian Writing in English.
3. Learn to use literature to develop their moral and social sense.
4. Develop writing, analytical and expression skills.
5. Create interest in the different genres of Indian writing in English.

Paper II(A): American Literature**BAIIEG-B**

On studying this paper, the student will be able to:

1. Develop passion for American language and literature.
2. Gain knowledge of the major traditions of American literature.
3. Become accomplished and active readers.
4. Develop writing and oral communication skills and may develop an appreciation for different genres.

Paper II(B): 20th Century Literature in English BAIIEG-B

On studying this paper, the student will be able to:

1. Gain knowledge of the major theoretical and critical terms of twentieth-century English literature.
2. Get an insight into the major issues related to the cultural and social context introduced in the literature of the 20th century.
3. Appreciate the masterpieces of literature written in this literary period.
4. Improve their interpretive skills and textual analysis in reading literature.

Course Outcomes:**M.A. I & II Sem.****Subject: English****Paper I: Poetry I and II****MEGI-A and MEGII-A**

On studying this paper, the student will be able to:

1. Analyze various elements of poetry such as diction, tone, form, genre, imagery, figures of speech, symbolism, themes etc.
2. Recognize the rhythms, metrics and other aspects of poetry.

3. Develop an appreciation of language and style.
4. Understand the thought and imagination contained in the poem correlating it with contemporary scenario. 5. Understand the development of poetry from the beginning to the modern age.
6. Inculcate their aesthetic sense and love for English poetry.

Paper II: Drama I and II

MEGI-B and MEGII-B

On studying this paper, the student will be able to:

1. Have firsthand knowledge of major dramatists and their work from Elizabethan to the Modern age.
2. Be acquainted with the literary movements, development of English drama and variety of experiments made like revenge tragedy, tragicomedy, romantic comedy, satirical comedy, historical play, poetic drama, problem play etc.
3. Be familiarise with dramatic art and techniques and later may adopt their performing art as his/her vocation.
4. Demonstrate understanding of social and artistic movements that have shaped English theatre.
5. Analyse and interpret texts and performances both in writing and orally.
6. Demonstrate knowledge of theatre history and literature and draw connections between theatrical practices and social contexts in different periods.

Paper III Prose I and II

MEGI-C and MEGII-C

On studying this paper, the student will be able:

1. To develop the language ability of the students.
2. To enable the students to comprehend the idea contained in the prose.

3. To develop an appreciation for the literary content.
4. To enhance creative and critical thinking.
5. To familiarize with eminent prose writers and their works.

Paper IV: Fiction I and II

MEGI-D and MEGII-D

On studying this paper, the student will be able to:

1. Be acquainted with the development of various genres i.e. poetry, prose, fiction and criticism correlating it with contemporary socio-economic, religious and political scenario.
2. Develop and integrate language skills.
3. Develop an interest in the appreciation of fiction.
4. Be acquainted with eminent writers and their fictional works.
5. Develop empathy with the fictional characters.
6. Recognize various narrative techniques, styles and forms.
7. Foster critical insight and develop critical imagination.
8. Understand the complex dynamics of human relationship.

Paper V Language Management and Communication Skills I and II MEGI-E and MEGII-E

1. Understand the concept of communication and its types.
2. Critically think about communication processes and messages
3. Produce words with right pronunciation, develop vocabulary and improve the accuracy in grammar
4. Enhance their communication skills as they would get adequate exposure in reading writing, speaking and listening skills

5. Will be able to get rid of their flaws and mistakes in pronunciation and grammar.
6. Gain confidence in oral and interpersonal communication

M.A. III & IV Sem.

Subject: English

Paper I: Critical Theory I and II

MEGIII-A and MEGIV-A

On studying this paper, the student will be able to:

1. To span the history of western literary criticism and introduce students to vital moments in its history.
2. Training students in the art of interpretation of literary texts.
3. Equip students with terms and concepts towards critical reading of textual material.
4. Update with the major theoretical movements in 20th century.
5. Identify and use key concepts and theories to interpret literary texts.

Paper II: Indian Writing in English I & II

MEGIII-B and MEGIV-B

On studying this paper, the student will be able to:

1. Made familiar with representative writers and their work in genres like poetry, drama, prose and fiction
2. Introduce pioneers of Indian writing in English as well as some of the contemporary writers and works of English in translation.
3. Develop the ability to handle a range of analytical and research methodologies in critical studies.
4. Buildup & project honest and true image of India.
5. Made acquainted with the problems faced by Indian Writers in English.

Paper III: American literature I and II**MEGIII-C and MEGIV-C**

On studying this paper, the student will be able to:

1. Be familiar with the history of America along with major literary movements of American literature.
2. Develop analytical skill for critical engagement with the text and skills for argumentative writing.
3. Be familiar with the philosophy of America & showing its relation with oriental and German philosophy.
4. Explore American literary tradition from American thought and political writing to American literary expression.

Paper IV: Linguistics I and II**MEGIII-D and MEGIV-D**

On studying this paper, the student will be able to:

1. Create an enquiry into the function of language and lay ground work for systematic study of the science of language.
2. Better understand human speech sounds. The knowledge of IPA would improve pronunciation and help in transcription.
3. Use the knowledge of linguistics in the area of language teaching.
4. Be acquainted with a variety of teaching aids so that it can gainfully be used in classroom teaching.
5. Identify different kinds of relationships that are possible in a phrase structure tree.
6. Conceptualise framework and draw conclusions and apply language learning techniques in the classroom. This will also carve them to be a good teacher in future.

Paper V (A): New Literatures in English I & II**MEGIII-E and MEGIV-E**

On studying this paper, the student will be able to:

1. Gain an understanding of unique aspects of diverged literatures.
2. Discover the universality and timelessness of literary texts.

3. Demonstrate knowledge and understanding of a range of New literatures in English in its historical and cultural contexts.
4. develop an understanding of issues of cultural plurality and hybridity.
5. Recognise literary negotiations of colonization and decolonization, identity, inequality, marginalization and so on.
6. Appreciate aesthetic, moral and cultural trends in literature in English language.

Paper V (A): Research Methodology and Computer Application I & II

MEGIII-E and MEGIV-E

On studying this paper, the student will be able to:

1. Have a clear concept of research.
2. Understand the stages of research and the procedures involved in it
3. To highlight the significance of systematic planning and execution of research activity.
4. Demonstrate the ability to choose methods appropriate to research aims and objectives.
5. Develop advanced critical thinking skills
6. To give the students practice in the use of various tools and techniques of research.
7. Demonstrate enhanced writing skills
8. prepare a proposal (to undertake a project).
9. Write a research report and thesis.

Course Outcomes:

BA. / B.Sc. /B.Com. Semester I

Subject: English Language I: BAELG101/ BSCELG101/BCOMELG101

On studying this paper, the student will be able to:

The course will enable the students to:

1. Make them familiar with English speech sounds, thereby improving their pronunciation. Develop fundamental skills required for close reading and critical thinking of the texts and concepts
2. Have an appreciable understanding of English grammar.

3. Produce grammatically and idiomatically correct spoken and written discourse.
4. Spot language errors and correct them.
5. Equip the students with basic language skills along with improved non-verbal skills thereby improving their employability quotient.
6. Write Personal and Business Letters with the proficiency needed in day-to-day correspondence.
7. Acquire micro and macro language skills.
8. Develop digital literacy skills.

BA. / B.Sc. /B.Com. Part II

Subject: English Language: BAII-EL/ BSCII-EL/BCOMII-EL

On studying this paper, the student will be able to:

1. Discuss and respond to the content of the passage.
2. Acquire knowledge of development of science and information technology.
3. Develop the writing skills through exercises in grammar and composition.

BA. / B.Sc. /B.Com. Part III

Subject: English Language: BAIII-EL/ BSCIII-EL/BCOMIII-EL

On studying this paper, the student will be able to:

1. Be familiar with the values of Indian life and social system.
2. Understand the development of India in the Modern context.
3. Develop linguistic competence and communication skills.
4. Inculcate writing skills through essay writing and comprehension.

Course Outcomes:

B.A. I

Subject: Psychology

Semester I: Fundamentals of Psychology

PSY-101

On studying this paper, the student will be able to:

1. Understanding what psychology is all about.
2. Appreciation of the scope and field of psychology.
3. Developing familiarity with the basic concept related to the foundational theme of study in psychology such as learning, memory, motivation, Emotion, perception and human biological system including brain.
4. Developing familiarity with individual level phenomenon such as Intelligence and Personality.

Semester II: Psychopathology

PSY-202

On studying this paper, the student will be able to:

1. Learn about mental health.
2. Know about mental health issues.
3. Learn about diagnosis.
4. Its outcome
5. Prognosis
6. Etiology
7. Treatment

On studying this course, the student will be able to:

1. Psychological testing is very useful to measure the behavior of an individual. The Curriculum has been designed, through which students learn to test the different aspects of behavior.

1. Learn to measure different behaviour like level of Anxiety, Depression and Stress tolerance.
2. Learn to test type of personality.
3. Learn to test Adjustment level towards society.
5. Learn to test the achievement motivation level of students.

B.A. II

Paper I: Social Psychology

BAIIPY-A

On studying this paper, the student will be able to:

1. Study human behavior in social setting.
2. Learn methods to study social behavior, social issues, social perception, and leadership.
3. Learn about themselves and how they see themselves through others' point of view (impression formation).

Paper II: Psychological Assessment

BAIIPY- B

On studying this paper, the student will be able to:

1. Learn about the type of tests, their construction process, and their standardization.
2. Explain the use of these tests in life.

3. Learn the difference between Psychological and Physiological assessment.

Practical

BAIIPY-C

On studying this course, the student will be able to:

1. Learn Group behavior
2. Learn about self concept
3. Learn Interest for career

B.A. III

Paper I: Psychological Statistics

BAIIPY-A

On studying this paper, the student will be able to:

1. Gain knowledge about various steps of research.
2. Learn the statistical tool for the analysis of their data.

Paper II: Human Development

BAIIPY-B

On studying this paper, the student will be able to:

1. Know about various stages of life in human development.
2. Learn both physical and mental processes and psychological aspects of these processes.
3. Learn about the development of their self identity crisis, ageing, gender discrimination and many more areas of humans.

Practical

BAIIPY-C

On studying this course, the student will be able to:

1. Learn learning with brain function

2. Depth Perception and illusion in vision
3. Learn to measure mental health
4. Through field study they get research experience.
5. Learn how aspiration level varies with each trial.

Course Outcomes:

B.A.I

Subject: Political Science

Semester I: Political Theory

POL101

On studying this paper, the student will be able to understand:

1. Meaning and Definition of Political Science.
2. State and its Essential Elements
3. Saver eighty and its Meaning
4. Kinds of Government
5. Public Welfare State.

Semester II: Indian Government and Politics

POL201

On studying this paper, the student will be able to understand:

1. Indian National Movement, Constitutional Development
2. Constitution of India, Fundamental Rights
3. Union Executive
4. Indian Judiciary
5. State Legislature

B.A. II

Subject: Political Science

Paper I: Western Political Thought

BAIIP0-A

On studying this paper, the student will be able to:

1. Know about main western political thinkers like Plato, Aristotle, Hobbes, Locke, Rousseau and their thoughts about political institutions.
2. Know the different principles given by various thinkers.

Paper II: Comparative Government and Politics

BAIIP0-B

On studying this paper, the student will be able to:

1. Know the main political system which is adopted by different countries.
2. Know about the main characteristics of political system of different countries like Britain, China, America and Switzerland.

B.A. III

Subject: Political Science

Paper I: International Politics

BAIIIP0-A

On studying this paper, the student will be able to:

1. Know about the significance of international politics and its impact on different countries.
2. Know about the Disarmament, Globalization and Diplomacy etc.

Paper II: Public Administration

BAIIIP0-B

On studying this paper, the student will be able to get:

1. Knowledge of Public Administration, its importance and scope.
2. Knowledge about government's part like legislature, executive and judiciary and its control on administration.

Course Outcomes:

M.A. I Sem.

Subject: Political Science

Paper I: Political Thought

MPOI-A

On studying this paper, the student will be able to:

1. Understand different political ideologies of various thinkers.
2. Know students the importance of different political thought and theories.

Paper II: Comparative Politics

MPOI-B

On studying this paper, the student will be able to:

1. Know the characteristics and main features of politics of different countries.
2. Know the differences in main political system of different countries.

Paper III: Public Administration I

MPOI-C

On studying this paper, the student will be able to:

- 1. Know the meaning and importance of Public Administration.**

2. Know about private and public administration.

Paper IV: CG Government and Politics MPOI-D

On studying this paper, the student will be able to:

1. Gain general knowledge of history, culture and language of Chhattisgarh.
2. Get knowledge regarding the politics and Government of Chhattisgarh.

M.A. II Sem.

Subject: Political Science

Paper I: Western Political Thought MPOII-A

On studying this paper, the student will be able to:

1. Know various political thoughts and their importance in today's political systems.
2. Know various theories given by political thinkers about politics.

Paper II: Politics of Developing Countries MPOII-B

On studying this paper, the student will be able to:

1. Know the working and importance of political parties and pressure groups of different countries.
2. Know the functions and organization of legislature, Executive and Judiciary.

Paper III Public Administration II MPOII-C

On studying this paper, the student will be able to:

1. Know the working of personnel administration, Bureaucracy, Union Public Service Commission and about recruitment.
2. Know about financial administration and formation of budget and its importance in Administration.

Paper IV: Foreign Policy of India

MPOII-D

On studying this paper, the student will be able to:

1. Know about the theforeign policy of India with various countries such as Bangladesh, China, Nepal and Cylone.
2. Know about the basic and main features of Indian foreign policy.

M.A. III Sem.

Subject: Political Science

Paper I: Indian Govt. and Politics

MPOIII-A

On studying this paper, the student will be able to:

- 1 Get knowledge about constitution, its characteristics and fundamental rights.
2. Get knowledge about Parliament, Supreme Court, judicial review and judicial activism.

Paper II: International Politics

MPOIII-B

On studying this paper, the student will be able to:

1. Know about international politics and its importance.
2. Know the concept of world state and different principles of international policies.

Paper III: Research Methodology

MPOIII-C

On studying this paper, the student will be able to:

1. Gain knowledge of research methodology.
2. Develop research skills as research is necessary for the academic development of the subject.

Paper IV: International Organizations MPOIII-D

On studying this paper, the student will be able to:

1. Get knowledge about the role and importance of international organizations like League of Nation and U.N.O.
2. Get knowledge about the structure and functions of these organizations and its agencies.

M.A. IV Sem.

Subject: Political Science

Paper I: Politics of State MPOIV-A

On studying this paper, the student will be able to:

1. Get knowledge about the centre and state relations and their importance.
2. Get knowledge of influence of caste, religion, region and language in Indian politics.

Paper II: International Politics and Contemporary Issues MPOIV-B

On studying this paper, the student will be able to get:

1. Knowledge of Non alignment, cold war, Globalization, Human Rights, Environment etc.
2. Knowledge about New World Order and Terrorism.

Paper III: Research Methodology and Field Work MPOIV-C

On studying this paper, the student will be able to:

1. Learn the use of tools and techniques in data collection.
2. Learn the use of statistics and use and significance of computer in research.

Paper IV: International law

MPOIV-D

On studying this paper, the student will be able to:

1. Know what are international laws and its importance.
2. Get knowledge about the rights and duties of state.
3. Know about the limitations and possibilities of international law.

Course Outcomes:

B.A.I

Subject: Ancient Indian History

Semester I: Element of Indian Archaeology

AIH101

On studying this paper, the student will be able to know:

1. Archaeology
2. Archaeological Martial antiquities obtained from the excavation.
3. About the rise of human being.

Semester II: Political History of Ancient India from Beginning to Second Century BCAIH201

On studying this paper, the student will be able to know:

1. India history

2. About different ruling dynasties of ancient period.

B.A.II

Subject: Ancient Indian History

Paper I: Ancient Indian Social & Economic Institution BAIIAH-A

On studying this paper, the student will be able to:

Study Indian society that subjected to a variety of impacts under which the Indian people had to learn to adopt themselves to an ever- changing environment.

1. Study Social organization in India which is often remarked as the caste system.

Paper II: Ancient Indian Polity BAIIAH-B

1. All forms of Human organization that of the state.

B.A.III

Subject: Ancient Indian History

Paper I: Fundamentals of Indian Art & Architecture BAIIIAH-A

Paper II: Fundamentals of Epigraphy and Numismatics BAIIIAH-B

On studying this paper, the student will be able to:

1. Study the Indian art tradition as one of the oldest living art traditions in the world.

2. Know the art of country with its history social & economical perspective.

3. Learn about excavation of the sites of the old towns like Harappa Mohenjo-Daro & Taxila and information of the other ancient monuments.

Course Outcomes:

M.A. I&II Semester

Subject: Ancient Indian History

Paper I: History of India (From Early Times to 4th Century BC) MAHI-A

Paper II: History of India (From 319-600 AD) MAHII-A

On studying this paper, the student will be able to:

1. Learn "Historiography in India was never more than a branch of epic poetry."
2. Get the glimpse of the glorious 'cultural heritage heritage of India in right perspective & without a tinge of bias & an iota of exaggeration.

Paper II: History of India (From 4th Century BC to 319 AD) MAHI-B

Paper II: History of India (From 600 AD-1200 AD) MAHII-B

On studying this paper, the student will be able to:

1. Learn that Unity in diversity is the basic theme of Indian culture & continuity & changes are its main currents.
2. Our culture abhors pollution & assimilates the essentials. The Greeks, the Scythians, the hernias & many others came, saw & conquered India but now they have lost their distant ethnic identities & are known today as "Indians" Bharat their motherland. Let us preserve this cultural unity & scorn communalism separatism & terrorism.

Paper III: Ancient Indian Social & Economic Institutions I MAHI-C

Paper III: Ancient Indian Social & Economic Institutions II MAHII-C

On studying this paper, the student will be able to:

1. Get information about Indian society subjected to a variety of impacts under which the Indian people had to learn to adopt themselves to an ever- changing environment.
2. Get Knowledge about the caste & the guild two dominant forms of social & economic organization in ancient India.

Paper IV: Ancient Indian Polity I

MAHI-D

Paper IV: Ancient Indian Polity II

MAHII-D

On studying this paper, the student will be able to:

1. Know about the Arthashastra or science of polity of Kautilya as the cumulative expression of a long tradition of political speculation & theorizing.
2. Know about studies on state formation & state structures which have often stressed the importance of the ideology, despite the inherent analytical & conceptual difficulties that the notions of ideology possess.

M.A. III & IV Sem.

Subject: Ancient Indian History

Paper I: Numismatics I

MAHIII-A

Paper I: Numismatics II

MAHIV-A

On studying this paper, the student will be able to:

1. Study the Indian coins to be enlightened with a great deal regarding the history of ancient India.
2. Know that coins help us to build up the history of the country in many ways.
3. Get information about the kings who ruled at various times in different parts of the country.
4. Fix up the chronology. The location of coins helps us to determine the extent of the territory of a king.
5. Learn that Coins are discovered from time to time either in the archaeological excavations purposely or accidentally.

Paper II: Epigraphy & Palaeography I

MAHIII-B

Paper II: Epigraphy & Palaeography II

MAHIV-B

On studying this paper, the student will be able to:

1. Epigraphy is the study of inscriptions & inscriptions literally means any writings engraved on some objects.
2. Inscriptions are of great value as they are engraved on stones & metals. They cannot be tampered with without detection.
3. The knowledge of epigraphy & palaeography has to be acquired by an intensive study of numerous published inscriptions.

3. Inscription can be grouped under the following heads: commercial, magical, religious, administrative, eulogistic, dedicative, commemorative & literary.

Paper III: Art & Iconography I

MAHIII-C

Paper III: Art & Iconography II

MAHIV-C

On studying this paper, the student will be able to:

1. Indian art is not only one of the oldest & profusely productive but it also shows a remarkable diversity of forms of expression.
2. Information about the art of every country which has deep roots in its history, social & economic. The art of ancient India has grown in & developed out of a specific milieu. The conditions of which have determined the forms of its expression & controlled the pace of its growth.
3. The history of the art of ancient India is to be very significant. The Indian art tradition is one of the oldest living art traditions in the world.

Paper IV: Architecture I

MAHIII-D

Paper IV: Architecture II

MAHIV-D

On studying this paper, the student will be able to:

1. Learn about architecture in India that is represented by many different types of buildings which however may be referred to as two conventional divisions (a) religious & (b) secular.
2. About the ancient monuments like buildings, statues of stone or metals, terra-cotta ornamental & decorative fragments, pottery etc. give us a lot of useful & reliable information.

Course Outcomes:

B.A. I

Subject: Economics

Semester I: Micro Economics

ECO101

Upon successful completion of this Paper the student will be able to understand:

1. Consumer demand analysis

2. Concepts of production and costs
3. Various market forms and determination of prices
4. Factor price determination
5. Introduction to welfare Economics

Semester II: Indian Economy

ECO201

Upon successful completion of this Paper the student will be able to understand:

1. How Indian economy is changing toward a market-based economy.
2. The basic features of Indian Economy.
3. Planning in India and economic reforms.
4. Role of Industry and policy decisions
5. Importance of foreign sector and export promotion measures.

B.A. II

Subject: Economics

Paper I: Macro Economics

BAIEC-A

Upon successful completion of this Paper the student will be able to understand:

1. National income and understand how it is calculated.
2. Factors responsible for employment determination.
3. Consumption and investment and their importance in N.I. determination.
4. Trade cycles and various factors responsible for trade cycle.
5. Export- Import and its related concepts
6. International institutions for trade and Economics.

Paper II: Money Banking and Public Finance

BAIEC-B

Upon successful completion of this Paper the student will be able to understand:

1. How value of money changes.
2. Inflation and measures to control inflation.
3. Banks, their role in economy and Central Banking System.
4. State and effect of its intervention in the economy.
5. Sources of various revenues to state.
6. Public debt and economics effects.

B.A. III

Subject: Economics

Paper I: Development and Environmental Economics BAIIEC-A

Upon successful completion of this Paper the student will be able to understand:

1. Economic well being of various nations; Poverty and emerging trends to measure poverty and deprivation.
2. Population and Economy linkage, various perspective developments.
3. Environment, Growing importance of study of Environment Economy inter play.
4. Various socio- economic issues affecting mankind.

Paper II: Statistical Methods

BAIIEC-B

Upon successful completion of this Paper the student will be able to understand:

1. Statistics, data collection
2. Measurement of representative values.
3. Easement of various representative values.
4. Inter-relationship between social and economic variables.
5. Construction of Index numbers and Measurement of trend.

Course Outcomes:

M.A. I Sem

Subject: Economics

Paper I: Micro Economics

MECI-A

Upon successful completion of this Paper the student will be able to understand:

1. Define Demand Theories Apply elasticity on price demand measurement.
2. Uses of various methods to implore consumer behaviors.
3. Impact of Time pattern on production process.
4. Cost & Revenue analysis in various market forms.

Paper II: Macro Economics

MECI-B

Upon successful completion of this Paper the student will be able to understand:

1. The Flow of National Income.
2. Various assessment of national income.
3. factors affecting employment and income.
4. Consumption & Investment.
5. Money and its supply and demand.

Paper III: Quantitative Methods

MECI-C

Upon successful completion of this Paper the student will be able to:

1. Measure Skewers in data.
2. Measure relationship between economic variables.
3. Understand interdependence and permutation between various factors.
4. Learn How to find values through Extrapolation and Interpolation.
5. Understand time based variables and importance and construction of Index Number.

Paper IV: Indian Economy**MECI-D**

Upon successful completion of this Paper the student will be able to learn:

1. Component and structure of National Income.
2. Demographic features of India.
3. Agriculture and its importance in Indian economy.
4. Industrialization and initiative taken for industrialization of India.
5. Regional imbalance.

Paper V: Industrial Economics**MECI-E**

Upon successful completion of this Paper the student will be able to understand:

1. Firm Industry and factors affecting their location.
2. Factors affecting productivity & capacity utilization and profitability of a firm.
3. Funding of Industry and firm.
4. Labor related issues.
5. Some big industries of Chhattisgarh.

M.A. II Sem.**Subject: Economics****Paper I: Micro Economics Analysis****MECII-A**

Upon successful completion of this Paper the student will be able to understand:

1. How a firm takes decisions to maximize its objective.
2. Determination of returns to various factors of production.
3. Welfare economics imply value judgment and assess principles of welfare.

4. Analyze economy as a whole.

5. Operational problem solution.

Paper II: Macro Economics Analysis

MECII-B

Upon successful completion of this Paper the student will be able to understand:

1. Price rise and employment inflation trade off.
2. Growth dilemmas unstable & unsteady growth.
3. Monetary policy for stability and growth.
4. Govt.'s policy and its economic implications.
5. Complexities of various monetary and fiscal measures.

Paper III: Research Methodology and Computer Application

MECII-C

Upon successful

completion of this Paper the student will be able to learn:

1. Research designs Methods to carry out researches.
2. Sampling Data collection to study and understand a problem.
3. Presentation of data. 4. Formulation of hypothesis and testing of hypothesis.
5. Uses of computer for Statistical Analysis.

Paper IV: Indian Economic Policy

MECII-D

Upon successful completion of this Paper the student will be able to understand:

1. Uses of planning process for growth and desired changes in Indian Economy.
2. Problem of poverty and measures taken to remove poverty and employment generation policies.
3. Working Finance Commissions to foster centre state relation.
4. Trade Reforms and contribution of export - import in Indian economy.

5. Budget and its importance international economic associations and their importance for India.

Paper V: Labour Economics

MECII-E

Upon successful completion of this Paper the student will be able to learn:

1. Labour Market Interplay of forces of Labour market.
2. Employment, wage and wage determinations, role of bargaining power.
3. Formation of trade union, utility and functioning of trade union.
4. Govt. intervention in labour market.

M.A. III Sem

Subject: Economics

Paper I: Economics of Growth

MECIII-A

Upon successful completion of this Paper the student will be able to understand:

1. Essence of economic growth, impediments to growth.
2. Measurements of Growth, Alternative discourse on Growth.
3. Perspectives of various economists on development and their formulation for speedy development.
4. Contraction in strategies of development.

Paper II: International Trade

MECIII-B

Upon successful completion of this Paper the student will be able to understand:

1. Importance of trade in economy of a nation.

2. Why does different nation trade.
3. What are conditions of trade and how these terms for trading determined.
4. Affects of trade on various macro parameters of Economy.
5. Balance of payment and measure to bring about desirable changes in international payment position of a country.
6. Determination of external value of domestic currency.

Paper III: Public Finance

MECIII-C

Upon successful completion of this Paper the student will be able to understand:

1. Taxation importance of taxation for Government.
2. Impact of taxes on production, consumption and distribution.
3. Changing pattern of taxation in India.
4. Different forms of taxation
5. Public expenditure and Public debt and its impact on economy.
6. Process of budget making.

Paper IV: Environment Economics

MECIII-D

Upon successful completion of this Paper the student will be able to learn:

1. Environment as part of Grand Economics Theory.
2. Environment as a factor in general welfare.
3. Economic welfare and its measurements.
4. Impact of Environment influencing activities on market forces of demand and supply.
5. Price calculation when Environmental influence affects market forces.

Paper V: Demography

MECIII-E

Upon successful completion of this Paper the student will be able to learn:

1. Factors governing population changes in population.
2. Role of Economic forces in shaping population trend of a nation.
3. Role of population in Economic parameters of a nation.
4. Factor responsible for birth rate, death rate, infant mortality rate.
5. Economic and demographic inter linkages.

M.A. IV Sem.

Subject: Economics

Paper I: Economics of Development and Planning

MECIV-A

Upon successful completion of this Paper the student will be able to understand:

1. Process of Planning, Planning in India and achievements of Indian Five Year Plan.
2. Various theoretical perspectives on strategies to remove backwardness.
3. Role of Govt. and Banking System in development of a Nation.
4. International comparison on two bases of poverty, prosperity and happiness.
5. Some important macro issues and their solution.

Paper II: International Economics

MECIV-B

Upon successful completion of this Paper the student will be able to learn:

1. Role of bilateral and multilateral integration.
2. Various international cooperative formations and their compact on different economies.
3. International capital movement, its advantages and disadvantages.
4. Various international Institutions for general economic improvement of participating nations.
5. Impact analysis of structural reforms of 1991 on the foreign trade of India.

Paper III: Public Economics

MECIV-C

Upon successful completion of this Paper the student will be able to understand:

1. Federal system of India.
2. Finances of States and Centre.
3. Constitutional provision to distribute resources between center and states and among states.
4. Idea of fiscal federalism.
5. Analysis of budgets of center and Chhattisgarh.
6. Fiscal analysis of Chhattisgarh.

Paper IV: Economics of Social Sector

MECIV-D

Upon successful completion of this Paper the student will be able to understand:

1. Pollution, impact analysis of Pollution and causes of Pollution.
2. Various laws to protect environment.
3. Uses of various natural resources and their implications and consequences.
4. Education as an important economic variable and outcome.
5. Health as an important economic variable and outcome.

Paper V: VIVA-VOCE

MECIV-E

Upon successful completion of this Paper:

Students are evaluated for their comprehensive ability to understand and explain two various economic facts of life through personal interface.

Course Outcomes:

B.A. I

Subject: Geography

Semester I: Geomorphology

GEO101

Upon successful completion of this Paper the student will be able to understand:

1. Understand the function of earth system in real time and analyse the natural and anthropogenic operation factors affecting the development of landforms
2. Distinguish between the mechanisms that control these processes
3. Assess the roles of structure, stage and time in shaping the landforms, interpret geomorphological maps and the knowledge in geographical research

Semester II: Geography of Human and Cultural Landscape

GEO201

Upon successful completion of this Paper the student will be able to:

1. Know the Changing of culture landscape. The Students will have ability to .
2. Understand patterns and processes of population growth, the land its implications.
3. Appreciate the nature and quality of human landscapes .

Practical I: Cartographic Techniques

GEOP101

1. Read and prepare Maps.
2. Use and Importance of Maps for regional development and decision-making.

Practical II Statistical Methods in Geography

GEOP201

1. Understand the Basis Data Collection and Processing for the meaningful Outcomes:
2. Comprehend the representation and interpretation of the result

B.A. II

Subject: Geography

Paper I: Economic and Resource Geography

BAIIGE-A

Upon successful completion of this Paper the student will be able to understand:

Natural resource management and optimum uses of resources.

Paper II: Geography of India

BAIIGE-B

Upon successful completion of this Paper the student will be able to gain:

Knowledge of physical and socio economical characteristics of India.

Paper III: Practical Geography

BAIIGE-C

Upon successful completion of this Paper the student will be able to understand:

1. Making projections and statistical methods.

B.A. III

Subject: Geography

Paper I: Remote Sensing and GIS

BAIIGE-A/BSCIIGE-A

Upon successful completion of this Paper the student will be able to learn that:

- Remote sensing is the process of detecting and monitoring the physical characteristics of an area.
- It is a modern technique which needs practice and learning.
- Chhattisgarh is a rich state from resource point of view. It is very necessary to increase number of experts of remote sensing and GIS.
- Students are benefitted by the improved syllabus. This will help in monitoring state's resources as well as career opportunities of the students will be enhanced.

Paper II: Geography of Chhattisgarh

BAIIGE-B

Upon successful completion of this Paper the student will be able to learn that:

- Chhattisgarh is a new state. Physical, economic and politico-cultural study is a must for geography students.
- Study for natural resources is necessary for monitoring and planning.
- Detailed study of the state is mandatory for state-level competitive examinations.

Paper III: Practical Geography BAIIGE-C

Upon successful completion of this Paper, the student will be able to understand:

1. Topographical Sheets and socio-economic survey of village.

Course Outcomes:

M.A. I Sem

Subject: Geography

Paper I: Geomorphology

MGEI-A

Upon successful completion of this Paper the student will be able to understand:

1. The structure of different part of earth and applied geomorphology.

Paper II: Climatology

MGEI-B

Upon successful completion of this Paper the student will be able to understand:
1. The structure of atmosphere and different types of climate and its characteristics.

Paper III: Geographical Thought

MGEI-C

Upon successful completion of this Paper the student will be able to get
1. Brief knowledge of history & development of Geographical Thoughts.

Paper IV: Geography of India

MGEI-D

Upon successful completion of this Paper the student will be able to gain:
1. Knowledge of physical and socio economical characteristics of India.

Paper V: Practical Geography-Advanced Cartography

MGEI-E

Upon successful completion of this Paper the student will be able to:
1. Acquire knowledge in the field of Map Making and Cartographic techniques. **M.A.**
II Sem.

Subject: Geography

Paper I: Economic and Natural Resource Management

MGEII-A

Upon successful completion of this Paper the student will be able to understand:
1. Natural resource management and optimum uses of resources.

Paper II: Oceanography

MGEII-B

Upon successful completion of this Paper the student will be able to:
1. Understand characteristics of oceanic water and their movement.

Paper III: Regional Development and Planning

MGEII-C

Upon successful completion of this Paper the student will be able to understand:
1. Specific regions and their development.

Paper IV: Social Geography

MGEII-D

Upon successful completion of this Paper the student will be able:

- 1.To know how to grow a society and their geographical aspect.

Paper V: Practical-II Map Projections, Map Interpretation and Surveying MGEII-E

Upon successful completion of this Paper the student will be able to understand:

1. Map projection and digital surveying by advanced equipment.

M.A. III Sem.

Subject: Geography

Paper I: Population Geography

MGEIII-A

Upon successful completion of this Paper the student will be able to gain:

1. Knowledge of population condition of the world and related problems.

Paper II: Regional Development and Planning

MGEIII-B

Upon successful completion of this Paper the student will be able to understand:

- 1.Rural and urban development of settlement and their problems.
2. Five Year Plans

Paper III: Geography of Chhattisgarh

MGEIII-C

Upon successful completion of this Paper the student will be able to:

- 1.Acquire knowledge of Chhattisgarh.

Paper IV: Research Methodology

MGEIII-D

Upon successful completion of this Paper the student will be able to understand:

- 1.Research techniques and their uses.

Paper V: Practical III : Remote Sensing,Interpretation of Map MGEIII-E

Upon successful completion of this Paper the student will be able to gain:

1.Knowledge of remote sensing, Geographic Information System. **M.A.**

IVSem.

Subject: Geography

Paper I: Urban Geography

MGEIV-A

Upon successful completion of this Paper the student will be able to gain:

1.Knowledge of urban structure and their problems.

Paper II: Agriculture Geography

MGEIV-B

Upon successful completion of this Paper the student will be able to gain:

1.Knowledge of Agriculture Regions and their theories.

Paper III: Environmental Geography

MGEIV-C

Upon successful completion of this Paper the student will be able to:

1.Understand elements of environment and its problems and management.

Paper IV: Field Work (Physical and Socio- Economic Survey) MGEIV-D

Upon successful completion of this Paper the student will be able to understand:

1.Survey Technique and Village Survey Field Work experience Tabulation and data processing.

Paper V: Quantitative Techniques

MGEIV-E

Upon successful completion of this Paper the student will be able to understand:

1Statistical methods and new techniques.

Course Outcomes:

Name of Programme: B.A. in Philosophy

1. Studying philosophy will help a student to analyse and construct sound arguments, distinguish fine differences between views and find common ground, present ideas convincingly through well-constructed, systematic arguments, generate ideas and come up with solutions to problems, be open to new ideas and ways of thinking and also understand related disciplines.
2. The course comprises of three years, the respective partition of which is dealt below.

B.A.Part I

Semester: Indian Philosophy

PHI101

Upon successful completion of this Paper the student will be able to understand:

1. The status of Indian Philosophy.
2. The phases of Indian Philosophy.
3. Various methods of studying the subject.

Paper II: Western Philosophy

PHI201

Upon successful completion of the course the students will get:

1. Knowledge of the western Philosophical traditions.
2. A broad introduction to the main thinkers and theories of western philosophy from antiquity up to the modern era.

The continuities as well as the ruptures in the Western Philosophical narrative.

B.A.Part II

Paper I: Ethics: Indian and Western

BAIIPS-A

Upon successful completion of this Paper the student will be able to understand:

1. Concepts of right and wrong conduct.

Paper II: Philosophy of Religion

BAIIPS-B

Upon successful completion of this Paper the student will be able to understand:

1. The meaning and nature of religion. It includes the analyses of religious concepts, beliefs, terms, arguments, and practices of religious adherents.

B.A.Part III

Paper I: Logic

BAIIPS-A

Upon successful completion of this Paper the student will be able to understand:

1. The nature of reasoning; articulate his/her thoughts in a logical and clear fashion; recognize fallacies; construct good arguments; evaluate deductive arguments; evaluate inductive arguments.

Paper II: Greek Philosophy

BAIIPS-B

Upon successful completion of this Paper the student will be able to understand:

1. From Thales, who is often considered the first Western philosopher, to the Stoics and Skeptics, ancient Greek philosophy opened the doors to a particular way of thinking that provided the roots for the Western intellectual tradition.

Course Outcomes:

Name of Programme: M.A. in Philosophy

Upon completion of this course the student will be able to explore such concepts as the nature of the world and how we have access to knowledge of the world; the relationship between our thoughts and the external world.

1. The student can get himself into several avenues including joining a University/College as Professor, can help him clear UPSC and State PSC Examinations, get appointed as a Philosophical Councillor and further one can find job opportunities in the following sectors

such as student affairs, journalism, creative writing, research, etc. A student can also work as advisors, lobbyist, and specialist in HR etc.

The course consists of two years divided into four semesters, the contents of each of which include:

M.A. I Sem

Paper I: Indian Ethics

MPSI-A

Upon successful completion of this Paper the student will be able to:

1. Express reasons in support of a moral claim.
2. Understand that there are better and worse reasons for making a moral decision.
3. Explain the difference between an act being morally permissible and being morally necessary.

Paper II: Indian Logic

MPSI-B

Upon successful completion of this Paper the student will be able:

To gain an understanding about the rich tradition and heritage about logic as it existed in the Nyaya, Jain and Buddhist culture.

Paper III: Indian Epistemology

MPSI-C

Upon successful completion of this Paper the student will be able to learn:

How correct knowledge can be acquired, how one knows, how one doesn't, and to what extent knowledge pertinent about someone or something can be acquired.

Paper IV: Indian Metaphysics

MPSI-D

Upon successful completion of this Paper the student will be able to:

Look upon it a means that helps man transcend his finitude and permanently cross over the ocean of samaras into a state of everlasting freedom.

M.A.II Sem

Paper I: Western Ethics**MPSII-A**

Upon successful completion of this Paper the student will be able learn about:

1. Self and what is rationally or logically true.
2. Its importance on law and justice.

Paper II: Western Logic**MPSII-B**

Upon successful completion of this Paper the student will be able learn about:

Symbolic logic, which is a way to represent logical expressions by using symbols and variables in place of natural language, such as English, in order to remove vagueness.

Paper III: Western Epistemology**MPSII-C**

Upon successful completion of this Paper the student will be able learn about:

1. The theory of knowledge.
2. The nature of knowledge, justification, and the rationality of belief.

Paper IV: Western Metaphysics**MPSII-D**

Upon successful completion of this Paper the student will be able learn about:

Western metaphysics which is the attempt to understand the universe by means of a logical investigation of concepts rather than an empirical inquiry based on sensory evidence.

M A III Semester**Paper I: Indian Philosophy of Language****MPSIII-A**

Upon successful completion of this Paper the student will be able learn that:

1. It is the branch of the earliest Indian thinking about language, found in Vedas.

2. It is speculative, but later discussions involve sophisticated arguments among various schools of thought which concern speech unites and associated meanings(artha), share certain themes.

Paper II: Analytical Philosophy

MPSIII-B

Upon successful completion of this Paper the student will be able learn that:

1. Analytical Philosophy is also called linguistic philosophy.
2. It is a loosely related set of approaches to philosophical problems, dominant in Anglo-American philosophy from the early 20th century, that emphasizes the study of language and the logical analysis of concepts.

Paper III: Modern Indian Thought

MPSIII-C

Upon successful completion of this Paper the student will be able learn that:

1. Modern Indian Thought is one of the fantastic areas of scholarly debates and discussions in contemporary India.
2. It also signifies a shift away from excessive reliance upon Eurocentric views, methods and concepts to study and interpret Indian philosophy and its society.

Paper IV: Phenomenology and Existentialism MPSIII-D

Upon successful completion of this Paper the student will be able learn that:

1. Phenomenology is a research technique that involves the careful description of aspects of human life as they are lived.
2. Existentialism, deriving its insights from phenomenology, is the philosophical attitude that views human life from the inside rather than pretending to understand it from an outside, objectively.

M A IV Semester

Paper I: Philosophy of Gandhi

MPSIV-A

Upon successful completion of this Paper the student will be able learn that:

1. Gandhi was not concerned with constructing a system of philosophy, but mainly with applying the ideals and principles that had become a part of his life.
2. For understanding Gandhi's philosophy it is necessary that the concepts be understood in the context of Hindu Philosophy.

3. It is equally important to bear in mind that Gandhi's connotations of terms are different from the prevalent ones. Quite often they sound national or geographical, when in fact they are universal.

Paper II: Philosophy of Yoga

MPSIV-B

Upon successful completion of this Paper the student will be able to learn:

1. Mind, body, and spirit are all one and cannot be clearly separated.
2. There is a multitude of philosophical ideas that are helpful to explore the deeper dimensions of the body, mind and spirit.

Paper III: Applied Ethics

MPSIV-C

Upon successful completion of this Paper the student will be able learn about:

1. Practical application of moral considerations.
2. Applied ethics is, by its very nature, a multi-professional subject because it requires specialist understanding of the potential ethical issues in fields like medicine, business or information technology.

Paper IV: Philosophy of Swami Vivekananda MPSIV-D

Upon successful completion of this Paper the student will be able learn that:

1. Vivekananda linked morality with control of mind, seeing truth, purity and unselfishness as traits which strengthened it.
2. He advised his followers to be holy unselfish and to have shraddha (Faith).
3. He supported brahmacharya, believing it the source of his physical and mental stamina and eloquence.

Course Outcomes:

Name of Programme: M.A. in Public Administration

M.A. I Sem

Paper I: Introduction to Public Administration

MPAI-A

The student will acquire knowledge about:

1. The concept of public administration, private administration & management.

2. Approaches to the study of public administration & development of the discipline.
3. Concept of organization; line & staff departments, public corporation & independent regulatory commission.
4. Concept of centralization, decentralization & delegation.
5. Administrative process like - policy formulation, decision making communication, leadership & motivation.

Paper II: Recent Trends in Public Administration

MPAI-B

The student will acquire knowledge about:

1. Administrative theories.
2. Management aids.
3. Concept of E-governance, Good-Governance, RTI, Ethics in public administration.
4. Some issues- crisis, stress, Time management, office and file management.
5. Accountability of public administration.

Paper III: Indian Administration

MPAI-C

The student will acquire knowledge about:

1. Evolution & present scenario of Indian Administration.
2. Parliamentary democracy & political executive.
3. Departments & board & commission.
4. Union-state relations, administrative reforms.

Paper IV: Development Administration

MPAI-D

The student will acquire knowledge about:

1. Concept & theory of development administration.
2. Features of developed & developing countries.
3. Concept of modernization, economic development & development programs.
4. Political development, social change and planning machinery in India.
5. Development and bureaucracy, public participation & environment development.

M.A. II Sem

Paper I: State Administration with Special Reference to Chhattisgarh

MPAII-A

The student will acquire knowledge about:

1. State government & administration.
2. Organization & working of state finance commission, state election commission, state planning commission.
3. Administration at the districts level.
4. Analyse some administrative issues like minister secretary relationship, ARC-I & II, administrative corruption.

Paper II: Municipal Govt. of India with Special Reference to CG State MPAII-B

The student will acquire knowledge about:

1. Concept of local self Govt. & 74th constitutional amendment.
2. Organization & functions of municipal corporations.
3. Personnel administration of municipal employees & state control and municipal administration & deliberative- executive relationship.
4. Committee system & problems & reforms in local self govt. Smart City Project, Swarna Jayanti Sahri Rojgar Yojna.

Paper III: Rural Development & Tribal Welfare in Chhattisgarh MPAII-C The student

will acquire knowledge about:

1. Concept of rural development dimensions of rural poverty & role of NGOs in rural development.
2. Rural development policy & strategy, approaches to rural development machinery for rural development in India.
3. Various rural development schemes like MNREGA, Swachhha Bharat Mission, social audit & Digital India.
4. Tribal welfare at district, block & village level in Chhattisgarh, legislation, problems & schemes tribal welfare.

Paper IV: Panchayati Raj with Special Reference to Chhattisgarh MPAII-D

The student will acquire knowledge about:

1. Concept & evolution of Panchayati Raj 73rd constitutional amendment.
2. Structure, Power & functions of three tier Panchayati Raj in Chhattisgarh.
3. Source of revenue of PRIs, state control over PRIs & rate of PRIs for weaker sections & women.

4. Deliberative - executive relationship in PRIs, political parties & pressure group in PRIs, problems of PRIs.
5. E- Panchayats, self-help groups & public distribution system in Chhattisgarh.

M.A. III Sem

Paper I: Comparative Public Administration

MPAIII-A

The student will acquire knowledge about:

1. Concept & evolution of comparative public administration.
2. Approaches to study of comparative public administration.
3. Weber's typology of authority & ideal type of bureaucracy, Rigg's typology of societies & prismatic-sala model.
4. Administrative system of U.K., China, U.S.A. & France.
5. Whitleyism in Britain IRC in U.S.A. prefect in Franthece, ombudsman in Sweden & role communist party in China.

Paper II: Personnel Administration & Human Resource Development MPAIII-B

The student will acquire knowledge about:

1. Concept of personnel administration & human resource management.
2. Concept & theories of Max Weber & Karl Marx About bureaucracy.
3. Recruitment, position classification & training of personnel in U.K, U.S.A. & France.
4. Concept of promotion, discipline morale & motivation.
5. Employer & employee relationship.

Paper III: Research Methodology in Public Administration

MPAIII-C

The student will acquire knowledge about:

1. Concept of research design, hypothesis and sampling.
2. Construction of questionnaires and schedules, role of interviewer.
3. Other methods of data collection.
4. Processing of data classification, tabulation and analysis of data.
5. Measurement of central tendency.

Paper IV: Administrative Law

MPAIII-D

The student will acquire knowledge about:

1. Concept of administrative law & rule of law.
2. Concept of delegated legislation legislative & judicial control over delegated legislation.
3. Concept & Functions of administrative tribunals.
4. Concept of natural justice legal remedies & liabilities of state.
5. Lokpal & Lokayukta, central vigilance commission & public interest litigation (PTI.).

M.A. IV Sem

Paper I: Civil Service in India

MPAIV-A

The student will acquire knowledge about:

1. Concept and structure of civil service, recruitment, training & promotion.
2. Salary administration.
3. Structure and function of UPSC, PSC & SSC.
4. Political right and right to strike & condition of service, conduct rules disciplinary action and machinery for redress of civil service grievances.

Paper II: Public Policy

MPAIV-B

By the end of the course, students will be able to:

1. Identify the major theoretical debates in contemporary policy studies;
2. Engage in literatures relevant to the study of public administration and bureaucracy
3. Contrast and compare existing research on public policy, discuss theoretical traditions and frameworks and critically engage in their arguments;
4. Interpret and judge different methodological strategies used in public policy research, and evaluate their core assumptions as well as their heuristic and explanatory potential;
5. Evaluate the relevance of existing frameworks and approaches for their own work;
6. Have an understanding of the major challenges and requirement of doing advanced research professionally in an academic or practical context.

Paper III: Management of Public Enterprises and Industrial Relations

MPAIV-C

The student will acquire knowledge about:

1. The role of public enterprises in national economy & problems of nationalization.
2. Forms of organization, government control & parliamentary accountability.

3. Concept of managerial personnel & problems of industrialization.
4. Labour welfare and its influence social security in India, U.K. and USA.

Paper IV: Financial Administration

MPAIV-D

The student will acquire knowledge about:

1. Ministry of finance and financial administration.
2. Budget types & techniques.
3. Control over public expenditure.
4. Finance commission, 14th finance commission, fiscal management policy and monetary policy.

Course Outcomes:

History

BA I

SemsterI: India History from Origin to 1206 AD

HIS101

Student will acquire knowledge:

1. regarding the primitive/life, and cultural status of ancient India.
2. They can gather knowledge about the society, culture religious and political history of Maurya, Gupta, Harsha Vardhan period and know the reason for foreign invasion in India at the ancient time.
3. They will also acquire knowledge of socio, economical cultural and administrative (political) scenarios of India and what is the picture of India in light of fo
4. Student can gather knowledge of reginal history.

Semester II: World History from 1453 - 1870 AD

HIS201 Student

will be able to analyse:

1. the historical development in Europe between 1453 to 1870.
2. they will acquire knowledge regarding the downfall of feudalism and the rise of the modern age. How was the Industrial Revolution start and after that the economy of the whole world was changed and the world phase the new political challenges like-

revolution reform moment and how the old imperialism was gone for ever and new imperialism was born (rise) and world phase the new problem of new imperialism.

BA II

Paper I: History of India (1206 - 1761 AD)

BAIIHT-A

Student will able to:

- 1. Identify the political, social, and religions development during the period 1206 to 1761 A.D.**
- 2. The changes regard to art, architecture and the field of socio religious like- Bhakti movement and Sufi movement.**
- 3. Students will be also learning how to Maratha power was emerged.**
- 4. In the syllabus introduce the religious history.**
- 5. Student can gather knowledge of regional history.**

Paper II: World History (1890 – 1964 AD)

BAIIHT-B

- 1. This course aim to provide and understanding of an era of shifting from Euro centric to world. Course also help the student to understand that in which condition the dictator were emerged and rais a new problem for whole world.**

BA III

B. A. Part III History

Paper- I History of India (1761 to 1947)

B. A. III HT- A

Course Outcome- Student will acquire knowledge regarding the European arrival in India, At that time what was the political condition f India, The student can gather knowledge about how the European's use and the Indian soil for . First Economic exploitation and after some time they will interfere in Indian politics and became the ruler of this country.” Syllabus introduce the Indian renaissance and Tribble culture of Chhattisgarh.

Paper- II History of Indian National Movement from 1857 to 1947 A.D. B. A. III HT- B

“The course aim to provide and understanding the main events of Indian National Movement. The study of different components and aspects of the national movement will lid the knowledge of regicrcel History”

Course Outcomes:
M.A. I & II Semester

Paper I- Methodology of History (Semester I)

MHT I-A

Paper I- Historiography (Semester II)

MHT II-A

Student will be identifying the methodology of History. Main contents of the syllabus related with the collection, selection, classification and interpretation of facts. Student also learn about the correlation of history with other social science (discipline). Second semester course related with the Historiography that provides Knowledge that in different age (Ancient, Medieval, Modern) what was the trends of History writing. Greco Roman. Chinese, Arabic, Persian and Indian Historiography. Student will also introduce the different type of the Interpretation of Indian History.

Paper II-History of Modern World 1871 to 1919 (Semester I)

MHT I-B

Paper II- Contemporary world 1919 to 1990 (Semester II)

MHT II-B

The student will be able to analyze the socio, Political economic principles of the different nations. The principles and objects of foreign policy. How was the political crisis start before the beginning of first world war.

The study of the course will play a role to acknowledge the political scenario of the world after first world war. And the treaty of Versailles was the main responsible factor for the second world war and the rise of Autocracy.

Paper III- Ancient and Medieval Chhattisgarh (Semester I)

MHT I-C

Paper III- Modern Chhattisgarh (Semester II)

MHT II-C

Student will acquire Knowledge regarding the Ancient and Medieval age of life, culture ruler dynasties, Main Profession, Society, Religion status of Chhattisgarh. They will also be introduced the positive role of Chhattisgarh in the various places and aspects of the contribution of Chhattisgarh in National movement.

The study of regional History will play the role for the various competitive examination and regional writings.

Paper IV- History of Indian National Movement 1885 to 1919 (Semester I) MHT I-D

Paper IV- History of Indian National Movement 1920 to 1947 (Semester II) MHT II-D

The object of the syllabus is to introduce the Primary activities of Indian national movement, aware about Nationalism and the study of the contribution of different components for Indian Independence

The course will enable the student to introduce the main events of Indian history during national movement. Student get knowledge that the Indian freedom struggle was totally different freedom struggle was totally different from the freedom movements of other country. Because the Indian national movement was based on truth and non-violence.

M.A. III & IV Semester

Paper I –Modern India Political and Administrative (1757 to 1857) (Semester III) MHT III – A

Paper will consist pre colonial political and administrative condition of India, student will know (Understand) that British Empire Expanded under the rule of British east India Company, policies and programme of company with Indian states

Paper I –Modern India Economic, Social and Cultural (1757 to 1857) (Semester IV) MHT IV – A

This programme is provide (understanding) knowledge about social, cultural and economic condition of pre-colonial India. The study of Rural Economy, Urban Economy, condition of Handicraft Industries, Industrialization, Indebtedness, Economic drain, social reforms during precolonial age.

Paper II –Modern India (1858 to 1964) Political and Administrative (Semester III) MHT III B

Study of the syllabus student will able to analyze the different ideology of modern Historiography, Arrival of European's and Expansion of British Empire. Relation with Indian States, Students also get knowledge about the Princely State, Tribal and Peasant movement and Ideologies.

Paper II –Modern India (1858 to 1964) Economic, Social and Cultural (Semester IV) MHT IV B

The course aim to provide understanding the rural, urban economy, Land reforms, Economic growth. Various social reform movement, women uplift efforts and the development of modern Education in India.

Paper III – Tourism – Principle and nature in Reference to History (Semester III) MHT III C

Paper III– Tourism principle and nature in Reference to History (Semester IV) MHT IV C
Learning outcome of this course (syllabus) is to provide the knowledge of main Historical Tourist Centers of India, Travel Agencies utility of Travel Agencies, Scope of Tourism in Chhattisgarh and the main Tourist places of Chhattisgarh. Student also introduce the importance of Tourism and the significance of National Parks in Tourism.

Paper IV - History of Great Britain (1815-1885)/Modern England(1885-1965)

MHTIII-D /MHTIV-D

From this syllabus student will identify the problems of Great Britain during 1815 to 1830, Foreign policy, reform movement like act of 1832, charist movement foreign policy of peel and russel. Eastern problem and great Britan.

The syllabus also provie the knowledge about home policy of England eastern problem, the role of England in first world war, foreign policy of England between world war. The condition of England after econd world war cold war and England.

Course Outcomes:

B.A./B.Sc./B.Com. First Year

Hindi Language

HLG101

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. हिन्दी भाषा के आधारभूत तत्वों की समझ विकसित करना है ।
2. भाषागत अशुद्धियों को दूर करना ।
3. संप्रेषण कौशल विकसित करना ।
4. भाषा का ज्ञान होना ।
5. भाषा का शुद्ध प्रयोग करना ।
6. पत्रों के प्रारूप से परिचित होना ।

B.A./B.Sc./B.Com. Second Year

Hindi Language

BAII-HL/BSCIII-HL/BCOMIII-HL

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. हिन्दी भाषा के विविध रूपों का ज्ञान ।
2. साहित्य, संस्कृति से जोड़ना ।
3. हिन्दी भाषा की व्याकरणिक कोटियों का ज्ञान कराना ।
4. संप्रेषण कौशल को विकसित करना ।

5. हिन्दी भाषा के आधारभूत ज्ञान प्राप्ति के साथ हिन्दी के विविध रूपों से अवगत कराना ।

B.A./B.Sc./B.Com. Third Year

Hindi Language

BAIII-HL/BSCIII-HL/BCOMIII-HL

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. संप्रेषण कौशल विकसित करना ।
2. हिन्दी भाषा के आधारभूत तत्वों की समझ विकसित करना ।
3. साहित्य स्रं कृति एवं सामान्य ज्ञान से परिचित कराना ।
4. रचनात्मक कौशल को बढ़ाना ।
5. व्याकरणिक ज्ञान ।

B.A. First Semester

Hindi Literature

Pracheen Evam Madhyakaleen Kavya

HLT101

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. हिन्दी साहित्य के इतिहास का ज्ञान
2. आदि काल से उत्तर मध्यकाल की कविताओं का परिचय
3. तात्कालीन कवि दृष्टि एवं रचना कौशल का ज्ञान
4. प्रतिनिधि कवियों की कृतियों एवं उनके वैशिष्ट्य का ज्ञान

B.A. Second Semester

Katha Sahitya

HLT 201

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. उपन्यास 'गोदान' एवं भूलनकांदा के माध्यम से भारतीय कृषि एवं न्याय जगत की समस्याओं की पड़ताल
2. उदभव काल से लगे र आज पर्यंत लिखी गई प्रतिनिधि कहानियों के माध्यम से विविध आयामी सूझ का विकास

3. प्रतिनिधि रचनाकारों का परिचय

B.A. Second Year

Paper I-Arvacheen Hindi Kavya

BAIIHI-A

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. विद्यार्थियों में आधुनिक चेतना और जीवन मूल्यों से युक्त युगीन भाषा, ससं कृति एवं समय की समझ विकसित होगी।
2. छात्र खड़ी बोली कविता के रचना शिल्प भाषा, सौष्ठव और सौन्दर्यबोध से अवगत होंगे।
3. द्विवेदी युगीन, छायावादी, राष्ट्रवादी एवं प्रयोगवादी काव्य प्रवृत्तियों का ज्ञान।

PaperII-Katha Sahitya

BAIIHI-B

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. कथा साहित्य से भिन्न अन्य गद्य विधाओं का ज्ञान प्राप्त होगा।
2. कथेत्तर गद्य के माध्यम से युगीन संदर्भ को जान सकेंगे।
3. मानव मन की अभिव्यक्ति के सशक्त माध्यमों से परिचित होंगे।
4. कहानी, उपन्यास विधा के माध्यम से अनुभूतियों, संवेदनाओं का साक्षात्कार।

B.A. Final Year

Paper I-Janpadiya Bhasha Sahitya (Chhattisgarhi)

BAIIIIHI-A

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. छत्तीसगढ़ी भाषा के आधारभूत तत्वों से परिचय कराना।
2. क्षेत्रीय भाषा को प्रोत्साहन देना।
3. छत्तीसगढ़ी साहित्य से परिचय कराना।
4. छत्तीसगढ़ी भाषा के रचनाकारों की कृतियों का अध्ययन।

Paper II-Hindi Bhasha Sahitya Ka Itihaas tatha Kavyaang Vivechan BAIIIHI-B

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में —

1. हिन्दी भाषा की आधारभूत ज्ञान प्राप्ति के साथ हिन्दी के विविध रूपों से अवगत कराना ।
2. हिन्दी के शब्द भण्डार से परिचित कराना, जिससे विद्यार्थियों की भाषा समृद्ध और परिमार्जित हो सके ।
3. हिन्दी साहित्य इतिहास की सक्षिप्त जानकारी देकर विद्यार्थियों को साहित्य के प्रमुख युक्त प्रवृत्तियों के साथ विकासक्रम से अवगत कराना तथा उस काल की ऐतिहासिक, सामाजिक, सांस्कृतिक पृष्ठभूमि से परिचित कराना ।
4. काव्यांग विवेचन में अलंकारों और छंदों का अध्ययन कर भाषा के सौंदर्य के साथ-साथ काव्य परंपराओं को भी समृद्ध करना ।

M.A Hindi Literature

Semester I

Paper I-Hindi Sahitya Ka Itihaas MHIA इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में —

1. हिन्दी साहित्य के अधिकार एवं भक्तिकाल की प्रवृत्तियों व रचनाकारों का अध्ययन
2. उक्त काल की समस्त पृष्ठभूमियों का अध्ययन

Paper II-Pracheen Evam Madhyakaleen Kavya

MHIB

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में —

1. आदिकाल एवं भक्तिकाल की रचनाओं का अध्ययन
2. लोक जागरण का भाव विकसित करना

Paper III-Aadhunik Hindi Kavya

MHIC

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में —

1. नवीन भाव-भूमि एवं वैचारिक गतिशीलता का प्रसार

2. आधुनिकता, इहलौकिकता , विश्वजनीयता एवं वैज्ञानिक दृष्टिकोण का विकास

Paper IV-Aadhunik Gadhya Sahitya

MHID

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. गद्य की विविध विधाओं के माध्यम से मानव जीवन के विविध पक्षों का उद्घाटन
2. ऐतिहासिक, सामाजिक, सांस्कृतिक मूल्यों का विकास

Semester II

Paper I-Hindi Sahitya Ka Itihaas

MHIIA

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. हिन्दी साहित्य इतिहास के आधुनिक काल एवं छायावादोत्तर काल का व्यापक अध्ययन
2. समस्त पृष्ठभूमियों, प्रवृत्तियों एवं प्रतिनिधि रचनाकारों का परिचय

Paper II-Hindi Sahitya Ka Itihaas

MHIIB

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. मध्यकालीन (सगुणभक्ति धारा/रीतिकाव्य का अध्ययन)
2. लोक मंगल, भावनात्मक एकता एवं सांस्कृतिक परंपरा से जोड़ना

Paper III-Hindi Sahitya Ka Itihaas

MHIIC

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. प्रगतिवाद एवं प्रयोगवाद के प्रमुख हस्ताक्षरों के अध्ययन
2. समकालीन भावाभिव्यंजना एवं शिल्पगत नवीनता से परिचय

Paper IV-Hindi Sahitya Ka Itihaas

MHIID

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. साहित्य, समाज, संस्कृति का दर्शन
2. आंचलिकता से रूबरू कराना ।

Semester III

Paper I-Kavyashastra Evam Sahityalochan

MHIIIA

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. रचना में मर्यादा का पालन करना
2. रचना को उसकी समग्रता में जांचना, परखना
3. साहित्यिक समझ विकसित करना

Paper II-Bhasha Vigyan Evam Hindi Bhasha

MHIIIB

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. साहित्य के गंभीर अध्ययन हेतु भाषिक व्यवस्था का ज्ञान
2. हिन्दी भाषा के ऐतिहासिक विकासक्रम को समझना
3. देवनागरी लिपि और मानकीकरण की प्रक्रिया को समझना

Paper III-Prayojanmoolak Hindi

MHIIC

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. रोजगार एवं जीविका के क्षेत्र में भाषा कौशल विकसित करना
2. जीवन और समाज की विभिन्न आवश्यकताओं के अनुरूप भाषा की दक्षता उत्पन्न करना

Paper IV-Bhartiya Sahitya

MHIID

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. भारत की विभिन्न भाषाओं का ज्ञान
2. भारतीय भाषाओं में हिन्दी साहित्य का स्थान निर्धारित कर हिन्दी साहित्य का विस्तार करना
3. भारतीय साहित्य के माध्यम से छात्रों के ज्ञान क्षितिज एवं ज्ञान दृष्टि का विकास करना
4. बंगला एवं हिन्दी साहित्य के इतिहास का तुलनात्मक अध्ययन

Semester IV

Paper I-Kavyashastra Sahityalochan

MHIVA

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. हिन्दी लक्षण परंपरा को जानना
2. हिन्दी आलोचना की प्रमुख प्रवृत्तियों को समझना
3. व्यवहारिक समीक्षा का ज्ञान

Paper II-Bhasha Vigyan Evam Hindi Bhasha

MHIVB

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. हिन्दी के विविध रूप का ज्ञान
2. हिन्दी की उपभाषाओं का ज्ञान
3. भाषा की वैज्ञानिकता के आधार पर भाषा के ऐतिहासिक विकासक्रम, भौगोलिक विस्तार एवं स्वरूप को समझना

Paper III-Prayojanmoolak Hindi(Patrakarita)

MHIVC

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. पत्रकारिता के स्वरूप और इतिहास को जानना
2. विभिन्न जनसंचार माध्यमों के महत्व को समझना

3. प्रमुख प्रेस कानून एवं आचार संहिता की जानकारी, साहित्य के साथ-साथ रोजगारपरकता की आकांक्षा की पूर्ति

Paper IV-Janpadiya Bhasha Evam Sahitya (Chhattisgarhi)

MHIVD

इस पाठ्यक्रम के अध्ययन के पश्चात् छात्रों में –

1. छत्तीसगढ़ी भाषा का नामकरण, बोलियों और व्याकरण का ज्ञान
2. छत्तीसगढ़ी साहित्य के इतिहास का परिचय
3. छत्तीसगढ़ी साहित्य की रचना और रचनाकारों से परिचित होना, क्षेत्रीय भाषा का प्रोत्साहित करना

Course Outcomes:

Sociology

B.A.Part I

Semester I: Introduction to Sociology

SOC101

छात्र/छात्राओं को सामाजिक अवधारणाओं का ज्ञानहाने के साथ-साथ सामाजिक स्वरूप, सामाजिक तादाम्य कैसे स्थापित करना आदि की जानकारी प्राप्त होती है ।

Semester II: Contemporary Indian Society

SOC201

मनुष्य जीवन में तथा सामाजिक जीवन में धर्म,कर्म,मोक्ष,आश्रम आदि प्राचीनतम अवधारणा का ज्ञान ।

B.A.Part II

Paper I: Sociology of Tribal Society

BAISO-A

यह प्रश्न पत्र जनजाति समाज का समाजशास्त्र है । उक्त प्रश्नपत्र में भारत की प्रमुख जनजातियों की सांस्कृतिक जीवनशैली, उनके आर्थिक एवं सामाजिक जीवन के सभी पक्षों को पढ़ाया जाता है जो कि समाजशास्त्र के छात्र/छात्राओं के ज्ञान एवं पिछड़ी जाति के जीवन चक्र को जानने हेतु महत्वपूर्ण है ।

Paper II: Crime and Society

BAIISO-B

इस प्रश्नपत्र में समाज में अपराध का अध्यापन कराया जाता है । उक्त विषय के माध्यम से छात्र/छात्राओं को अपराध क्या है ? उनके कारण, सिद्धांत, अपराध के विभिन्न प्रकार जैसे- आत्महत्या, सफेदपोश अपराध, साइबर अपराध, मद्यपान, दहेज आदि का अध्ययन एवं अपराध की रोकथाम, पुलिस, न्याय व्यवस्था आदि का अध्यापन कराया जाता है जो कि समाजशास्त्र के छात्र/छात्राओं के ज्ञानविस्तार हेतु आवश्यक है ।

B.A.Part III

Paper I: Foundation of Sociological Thought

BAIISO-A

- 1- विद्यार्थियों को समाजशास्त्र के अंतर्गत कौन-कौन से विद्वान हैं उसकी जानकारी होती है ।
- 2- विभिन्न समाजशास्त्रियों के सिद्धांतों की जानकारी प्राप्त होती है ।
- 3- भारत में समाजशास्त्रीय विचारधारा या चिंतन का विकास कैसे और कब हुआ एवं भारतीय विचारक जैसे महात्मा गांधी एवं राधाकमल मुखर्जी के विचारों एवं सिद्धांतों से परिचित होते हैं ।
- 4- विदेशी (पश्चिम) के विचारकों को जानकर उनके सिद्धांतों की जानकारी प्राप्त होती है ।
- 5- प्रतियोगी परीक्षाएं जैसे PSC, UPSC में उन्हें लाभ होता है ।

Paper-II: Method of Social Research

BAIISO-B

- 1- विद्यार्थियों को शोध की जानकारी होती है कि शोध कैसे करते हैं ।
- 2- शोध करने की पद्धतियों की जानकारी होती है ।
- 3- सामाजिक शोध में कम्प्यूटर का प्रयोग कैसे करते हैं इसकी उन्हें जानकारी प्राप्त होती है ।
- 4- M.A. , M.Phil. PhD. में उन्हें शोध करने में आसानी होती है आगे प्रतियोगी परीक्षाओं हेतु लाभ होता है ।

Course Outcomes:

Name of Programme: M.A. in Sociology

M.A. I Semester

Paper I: Classical Sociological Tradition

MSOI-A

Upon successful completion of this Paper the student will be able to understand:

- इसमें समाजशास्त्र के कई सामाजिक विचारकों के बारे में जानकारी ।
- समाजशास्त्रीय विचारकों में अगस्त काम्ते, इमाइल दुर्खीम, मर्के सवेल और कार्लमार्क्स के बारे में जानकारी ।
- समाजशास्त्र पर पुरा और आधुनिकता की जानकारी ।

Paper II: Philosophical and Conceptual Foundation of Research Methodology

MSOI-B

Upon successful completion of this Paper the student will be able to understand:

- शोध अनुसंधान की जानकारी ।
- शोध कार्यसंबंधी अनुसूची प्रकार एवं प्रक्रिया की जानकारी ।
- नवीन शोध की प्रक्रिया ।

Paper III: Social Change in India

MSOI-C

- समाजशास्त्र विषय में हुए सामाजिक परिवर्तन विषय पर जानकारी ।
- आधुनिकीकरण की परिस्थिति एवं बदलते आयामों के संबंध में जानकारी ।
- समाज के समयानुसार हो रहे परिवर्तन की जानकारी ।

Paper IV: Rural Sociology

MSOI-D

Upon successful completion of this Paper the student will be able to understand:

- ग्रामीणपरिस्थिति की विशेष जानकारी ।
- ग्रामीणसमाज एवं परंपरा संबंध की जानकारी ।

Practical: $\frac{1}{4}$ Interview Schedule $\frac{1}{2}$

MSOI-E

- 1 – विद्यार्थी शोध हेतु उपकरण एवं प्रविधि का प्रयोग करना सीखते हैं ।
- 2 – छात्र/छात्राएं किसी सामाजिक विषय या सामाजिक समस्या पर प्रश्न बनाना सीखते हैं ।
- 3 – वे साक्षात्कार अनुसूची बनाना व उसका प्रयोग करना सीखते हैं ।
- 4 – इस प्रकार वे सामग्री का सकल लेन करते हैं या तथ्यों का एकत्रीकरण करते हैं ।

II Semester

Paper I: Classical Sociological Thinkers

MSOII-A

Upon successful completion of this Paper the student will be able to understand:

- समाजशास्त्रीय विचारकों के सिद्धांत संबंधी जानकारी
- सिद्धांतों की प्रक्रिया एवं उनके प्रणाली के संबंध में जानकारी

Paper II : Quantitative Research Techniques

MSOII-B

Upon successful completion of this Paper the student will be able to understand:

- गुणात्मक शोध संबंधी जानकारी की प्राप्ति
- गुणात्मक अनुसंधान की प्रक्रिया एवं शोधकार्य संबंधी जानकारी की प्राप्ति ।

Paper III: Sociology of Development

MSOII-C

Upon successful completion of this Paper the student will be able to understand:

- समाजशास्त्रीय विकास के संबंध में जानकारी की प्राप्ति ।
- समाज के बदलते परिवेश एवं संचार के संबंध में जानकारी की प्राप्ति ।
- समाज के विकास के विभिन्न आयामों संबंधी जानकारी ।

Paper IV: Indian Rural Society

MSOII-D

Upon successful completion of this Paper the student will be able to understand:

- भारतीय ग्रामीण समाज के संबंध में जानकारी ।
- ग्रामीणसमाज की रूपरेखाएं परिवेश, परंपरा तथा परिस्थिति के संबंध में जानकारी प्राप्त होती है ।
- भारत के विकास में ग्रामीण समुदाय का विकास एवं निरंतरता एवं परिवर्तन संबंधी जानकारी ।

Practical: (Questionnaire)

MSOII-E

- 1 – विद्यार्थी प्रोजेक्ट हेतु टूल्स और तकनीक का उपयोग करना सीखते हैं ।
- 2 – प्रश्नावली बनाना सीखते हैं और डाक से भेजना जानते हैं ।
- 3 – सामग्री सफाई या तथ्यों का एकत्रीकरण करते हैं ।

III Semester

Paper I: Theoretical Perspectives in Sociology

MSOIII-A

Upon successful completion of this Paper the student will be able to understand:

- समाजशास्त्र के विषय में देखने का तरीका, प्रक्रियाएं समाजको हम किस रूप से देख रहे हैं, समाज के साथ व्यवहार एवं उनके ऊपर किये जाने वाले प्रक्रिया के बारे में जानकारी प्राप्त होती है ।
- पुराने परंपरा विषय की जानकारी ।
- कार्यक्षमता सिद्धांत के विशेष आयाम की जानकारी प्राप्त होती है ।
- सरल चनात्मक एवं संघर्षरूपी सिद्धांतों की जानकारी ।

Paper II: Social Movement in India

MSOIII-B

Upon successful completion of this Paper the student will be able to understand:

- समाजिक आंदोलन के संबंध में जानकारी ।
- भारत में हुए सामाजिक आंदोलन के संबंध में अलग-अलग समय में हुए विषय पर आधारित विषयों की जानकारी ।
- समाज के विकास के लिये किये गये आंदोलन एवं उसके परिणामों की जानकारी प्राप्त होती है ।

Paper III: Social Change in India

MSOIII-C

Upon successful completion of this Paper the student will be able to understand:

- समाजशास्त्र विषय में हुए सामाजिक परिवर्तन विषय पर जानकारी ।
- आधुनिकीकरण की परिस्थिति एवं बदलते आयामों के संबंध में जानकारी ।
- समाज के समयानुसार हो रहे परिवर्तन की जानकारी ।

Paper IV: Rural Sociology

MSOIII-D

Upon successful completion of this Paper the student will be able to understand:

- ग्रामीण परिस्थिति की विशेष जानकारी ।
- ग्रामीण समाज एवं परंपरासंबंधी जानकारी ।

Project Reports

MSOIII-E

- 1- किसी सामाजिक समस्या (ग्रामीण/नगरीय) को चुनकर उस पर अध्ययन करना सीखते हैं ।
- 2- प्रोजेक्ट टर्क अथवा प्रायोगिक कार्य हेतु उसका Synopsis(शोध प्रारूप) बनाना सीखते हैं ।
- 3- प्रस्तावना से लेकर अध्ययन के महत्व तक पूरी जानकारी भरते हैं ।

IV Semester

Paper I: Recent thinkers & Sociological Theories

MSOIV-A

Upon successful completion of this Paper the student will be able to understand:

- समाजशास्त्रीय सिद्धांत विषय की जानकारी ।
- वर्तमान समाज के अनुसार सिद्धांत एवं समाज की विशेषता तथा विचारकों की जानकारी
- समाजशास्त्रीय सिद्धांत जो आवश्यक हो समाज के विकास में ।

Paper II: Comparative Sociology

MSOIV-B

Upon successful completion of this Paper the student will be able to understand:

- समाज के विकास में हुए परिवर्तनों का तुलनात्मक अध्ययन ।
- समाज की तुलनात्मक जानकारी जो समय के अनुसार आवश्यक है ।
- समाज के विभिन्न आयाम एवं उसमें हुए परिवर्तन की विशेष जानकारी ।

Paper III: Sociology of Development

MSOIV-C

Upon successful completion of this Paper the student will be able to understand:

- समाजशास्त्रीय विकास के संबंध में जानकारी की प्राप्ति
- समाज के बदलते परवेश एवं संचार के संबंध में जानकारी की प्राप्ति समाज के विकास के विभिन्न आयामों संबंध में जानकारी ।

Paper IV: Indian Rural Society

MSOIV-D

Upon successful completion of this Paper the student will be able to understand:

- भारतीय ग्रामीण समाज के संबंध में जानकारी
- ग्रामीण समाज की रूपरेखाएं परिवेश एवं परंपरा तथा परिस्थिति के संबंध में जानकारी प्राप्त होती है।

- भारत के विकास में ग्रामीण समुदाय का विकास एवं निरंतरता एवं परिवर्तन संबंधी जानकारी।

Project Reports

MSOIV-E

- 1- विद्यार्थी शोध करना सीखते हैं कि किस प्रकार किसी ग्रामीण/शहरी समस्या या किसी भी सामाजिक विषय या योजना का अध्ययन कर सकते हैं।
- 2- वैज्ञानिक पद्धति को अपना कर किस प्रकार समाजशास्त्र में सामाजिक विषयों का अनुसंधान कर सकते हैं।
- 3- प्रारंभ प्रस्तावना से लगे र संदर्भग्रंथ सूची तक किस प्रकार कार्य करते हैं, सीखते हैं।
- 4- M.Phil एवं PhD हेतु लाभ होता है (Dissertation और Thesisमें)
- 5- प्रतियोगी परीक्षाओं जैसे-UPSC एवं CGPSC में सहायता होती है।

नोट :-उपर्युक्त पाठ्यक्रम पूर्ण रूप से समाजशास्त्र संबंधी जानकारी देता है जो समाजशास्त्र के विद्यार्थियों के लिये महत्वपूर्ण है।

Course Outcomes MSW I Semester

Paper I:

Social Work History and Ideology- Indian Perspective

MSWI-A

भारत में समाजकार्य के इतिहास एवं उद्भव के संबंध में जानकारी प्राप्त होती है।

Paper II: Population and Environment

MSWI-B

जनसंख्या एवं पर्यावरण के विभिन्न पहलुओं तथा इनसे नीति, कानून एवं अधिनियमों के संबंध में जानकारी प्राप्त होती है। जो कि पर्यावरण संरक्षण एवं

जनसंख्या संबंधी समस्याओं के निराकरण हेतु आवश्यक है।

Paper III: Working with Groups & Group Work MSWI-C

समाज कार्यकर्ता को समूह में कार्य करने की समझ बढ़ती है तथा समूहसंबंधी प्रबंधन, नेतृत्व, समस्या निवारण इत्यादि गुणों का विकास होता है।

Paper IV: Social Work Research – Qualitative Methods

MSWI-D

सामान्य बुद्धि एवं वैज्ञानिक बुद्धि में अंतर स्पष्ट होता है साथ ही अनुसंधान तकनीकों व उपकरणों के संबंध में जानकारी मिलती है।

Paper V: Human Growth and Development

MSWI-E

मानवीय जीवन चक्र की विभिन्न अवस्थाओं के संबंध में जानकारी मिलती है तथा उन सभी अवस्थाओं में व्यक्ति की आवश्यकताओं व समस्या संबंधी समायोजन की समझ बढ़ती है व सामाजीकरण की प्रक्रिया के बारे में पता चलता है।

MSW II Semester Paper I: Social Work History and

Ideology -Western Perspective MSWII-A पश्चिमी देशों में समाजकार्य के इतिहास एवं उत्पत्ति के संबंध में जानकारी प्राप्त होती है तथा पश्चिमी सभ्यता में समाजकार्य की तकनीक एवं प्रक्रिया के बारे में पता चलता है।

Paper II: Political Economy & Development

MSWII-B

समाजिक अर्थव्यवस्था से अवगत कराती है तथा आर्थिक समस्याओं व उनके समाधान संबंधी मॉडल के बारे में समझ बढ़ती है।

Paper III: Process & Evaluation of Development

MSWII-C

समूहनिर्माण की प्रक्रिया व उसकी विभिन्न अवस्थाओं के बारे में पता चलता है तथा समूह निर्माण करते समय किन बातों का ध्यान रखना चाहिए इसकी भी जानकारी मिलती है एवं समूह का मूल्यांकन किस प्रकार होना चाहिए व कब समूह समाप्त करना है, यह समझने में मदद मिलती है।

Paper IV: Social Work Research – Qualitative Methods

MSWII-D

सामाजिक अनुसंधान के अंतर्गत सांख्यिकीय गणनाओं तथा सामाजिक अनुसंधान की प्रक्रिया विप्लेशन एवं प्रतिवेदन लेखन के बारे में जानकारी प्राप्त होती है।

Paper V: Social Work Practicum

MSWII-E

विभिन्न संस्थाओं की कार्यप्रणालियों का प्रायोगिक अनुभव हाता है तथा सीमित रूप में डाटा कलेक्शन कर प्रतिवेदन निर्माण करने से सामाजिक अनुसंधान के लिए व्यावसायिक गुणों का विकास होता है।

MSW III Semester

Paper I: Sociology for Social Work in India

MSWIII-A

भारतीय समाज के संबंध में समझ बढ़ती है क्योंकि जिस समाज में इस कार्य करता है। सर्वप्रथम उसके संगठन व विभिन्न पहलुओं को समझना आवश्यक है।

Paper II: Social Work Personnel, Training & Development

MSWIII-B

सामाजिक कार्यकर्ता में व्यावसायिक गुणों का विकास होता है तथा मानव संसाधन की उपयोगिता की समझ बढ़ती है व प्रशिक्षण के द्वारा कर्मचारी विकास के बारे में जानकारी प्राप्त होती है।

Paper III: Family Social Work

MSWIII-C

परिवार एवं विवाह नामक संस्था के बारे में सम्पूर्ण जानकारी जिससे उसकी उत्पत्ति के सिद्धांतों के बारे में पता चलता है जो कि पारिवारिक परामर्श में मदद करता है।

Paper IV: Social Policy in India

MSWIII-D

भारतमें सामाजिक एवं आर्थिक विकास की नीतियाँ व उसके प्रारूपों की जानकारी मिलती है। जिससे कि एक समाजकार्य कार्यकर्ता समाज में कार्य करते हुए इन नीतियों का उपयोग कर सकता है।

Paper V: Legal System in India MSWIII-E

भारत में कानून व दण्डप्रक्रिया के बारे में जानकारी मिलती है जिससे व्यक्ति का पुनर्वास एवं सुधार जुड़ा हुआ है। इसकी जानकारी होने पर समाजकार्यकर्ता सवे र्थियों की कानूनी मदद आसानी से कर सकता है।

MSW IV Semester

Paper I: Social Control & Change in India

MSWIV-A

समाज में होने वाले परिवर्तनों के बारे में जानकारी प्राप्त होती है तथा उन परिवर्तनों से उत्पन्न समस्या का समाधान किस प्रकार किया जाय, समायोजन एवं नियंत्रण के विभिन्न साधनों व तरीकों के बारे में पता चलता है।

Paper II: Social Development

MSWIV-B

समाजिक विकास के विभिन्न घटकों की जानकारी मिलती है जिससे कि समाजिक कार्यकर्ता समाज में कार्य करते समय विभिन्न पहलुओं के द्वारा सामाजिक विकास में अपना योगदान दे सकता है।

Paper III: Social Planning in India

MSWIV-C

भारत में विभिन्न समस्याओं के निवारण तथा विकास के लिए बनाए गये योजनाओं के संबंध में जानकारी प्राप्त होती है जिससे किस विद्यार्थियों या हितग्राहियों को लाभान्वित किया जा सकता है।

Paper IV: Integrated Social Work Practice

MSWIV-D

समाज कार्यकर्ता द्वारा सवे र्थी के सर्वांगीण विकास जिसके अंतर्गत व्यक्तिगत सामाजिक मानसिक आर्थिक एवं अन्य सभी पहलुओं पर समझ बनती है तथा समाजकार्य की प्रक्रिया के बारे में जानकारी मिलती है।

Paper V: Research Project with Block Placement & Field Work Report MSWIV-E

समाजिक अनुसंधान की प्रायोगिक जानकारी मिलती है तथा क्षेत्रीय कार्यप्रतिवदे न के द्वारा प्रायोगिक अनुभव भी मिलता है।

BA I

Subject: Law

Semester I: Introduction to the Indian Legal System

LAW101

The course will enable the students to:

1. Demonstrate an understanding of substantive law as well as procedural law.
2. Enter the legal profession in which knowledge is an advantage.
3. Interpret relevant facts.
4. Conduct legal research.
5. Understand the laws at national and global levels.
6. Possess the skills to communicate in both oral and written forms.
7. Possess the ability to formulate legal problems using appropriate concepts.
8. Use skills in civil, criminal, industries clinical, social and counselling areas.
9. Understanding changing social dynamics.

Practical I:

LAWP101

The course will enable the students to:

10. Demonstrate an understanding of substantive law as well as procedural law.
11. Enter the legal profession in which knowledge is an advantage.
12. Interpret relevant facts.
13. Conduct legal research.
14. Understand the laws at national and global levels.
15. Possess the skills to communicate in both oral and written forms.
16. Possess the ability to formulate legal problems using appropriate concepts.
17. Use skills in civil, criminal, industries clinical, social and counselling areas.

Semester II: Justice System in India

LAW201

On completing this course the student will be able:

1. To understand the development of legal institution and juridical Intuitions.
2. To know the past of the present legal and judicial system.
3. Understand and appreciate the role of courts.
4. Know the various institutions that form part of the Indian Legal system
5. Acquire knowledge, skill and information of various types of courts, tribunals and commissions.
6. Understand and appreciate the role of the law in society.
7. Know the various instructions that form part of the Indian Legal system
8. Have knowledge about access to legal aid and justice, RTI and about the formal and alternative dispute redressal (ADR) mechanisms that exist in India.
9. Acquire knowledge, skill and information needed to become a responsible member of society.

Practical II:**LAWP201**

On completing this course the student will be able:

1. To understand the development of legal institution and juridical Intuitions.
2. To know the past of the present legal and judicial system.
3. Understand and appreciate the role of courts.
4. Know the various institutions that form part of the Indian Legal system
5. Acquire knowledge, skill and information of various types of courts, tribunals and commissions.
6. Understand and appreciate the role of the law in society.
7. Know the various instructions that form part of the Indian Legal system
8. Have knowledge about access to legal aid and justice, RTI and about the formal and alternative dispute redressal (ADR) mechanisms that exist in India.
9. Acquire knowledge, skill and information needed to become a responsible member of society.

Course Outcomes:**Name of the Programme: B.Sc. in Mathematics****B.Sc. I Year****Semester I: Calculus****MAT101**

This course will enable the students to:

- i) Calculate the limit and examine the continuity and understand the geometrical interpretation of differentiability.
- ii) Understand the consequences of various mean value theorems. iii) Draw curves in Cartesian and polar coordinate systems.
- iv) Understand conceptual variations while advancing from one variable to several variables in calculus.
- v) Inter-relationship amongst the line integral, double and triple integral formulations.

Semester II: Algebra**MAT201**

This course will enable the students to:

- i) Employ De Moivre's theorem in a number of applications to solve numerical problems.
 - ii) Learn about the fundamental concepts of groups, subgroups, normal subgroups, isomorphism theorems, cyclic and permutation groups. iii)
 - iii) Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix, using rank.
 - iv) Find eigen values and corresponding eigen vectors for a square matrix.
- Understand real vector spaces, subspaces, basis, dimension and their properties.

B.Sc. II Year

Paper I: Advanced Calculus

BSCIIMT-A

Upon successful completion of this subject the student will be able to:

1. Use in almost all branches of Engineering.
2. Learn Differentiation & integration
3. Learn measurable sets.
4. Understand nature of function, like cert. conv. & monotone.
5. Find area of double & volume of triple integral.

Paper II: Differential Equation

BSCIIMT-B

Upon successful completion of this subject the student will be able to know:

1. Differential equations are used in Mathematical Modeling.
2. Useful for solving many engineering problems.
3. It is used to solve both ordinary and partial differential equations.
4. Applications are in all branches of engineering.
5. Learn properties of Laplace transforms and inverse Laplace transforms.

Paper III: Mechanics

BSCIIMT-C

Upon successful completion of this subject the student will be able to:

1. Study about 2-dimensional motion.
2. Study about Simple Harmonic motion, Projectile.
3. Learn about Kepler's laws of motion.
4. Use in many fields of Engineering, especially Civil and Mechanical Engineering
5. Classical Mechanics finds a large number of interesting applications in daily life situations.

B.Sc. III Year

Paper I: Analysis

BSCIIIMT-A

Upon successful completion of this subject the student will be able to learn:

1. Properties of complex numbers.
2. The use of complex numbers in the field of Calculus.
3. It is used in fixed point theorem and mapping principles.
4. Study continuous functions and convergence of sequences on metric spaces.
5. Learn connected complete and compact metric spaces.

Paper II: Abstract Algebra

BSCIIIMT-B

Upon successful completion of this subject the student will be able to:

1. It is branch of algebra.
2. Used in Discrete Mathematics, Computer Science, Information Technology etc.
3. Learn about modules.
4. Learn about canonical forms.
5. Learn about Vector Space and Inner product.

Paper III: Discrete Mathematics

BSCIIIMT-C

Upon successful completion of this subject the student will be able to:

1. Understand the basics of graph theory.
2. Understand trees and spanning trees.
3. Used in Genomics, networks, etc.
4. Useful for understanding sets, logic and probability theory.
5. Used in Discrete Mathematics, Computer Science and I.T.

Course Outcomes:

Name of the Program: M.Sc. in Mathematics

M.Sc. I and II Sem

Paper I: Advanced Abstract Algebra I and Advanced Abstract Algebra II

MMTI-A and MMTII-A

Upon successful completion of this subject the student will be able to:

1. Have knowledge of some fundamental results and techniques from the theory of finite fields and their applications.

Explain the fundamental concepts of advanced algebra such as groups and fields and their role in modern mathematics and applied contexts.

2. 3

Apply problem-solving using advanced algebraic techniques applied to diverse situations in physics, engineering and other mathematical contexts

.Demonstrate capacity for mathematical reasoning through analyzing, proving and explaining concepts from advanced algebra.

4.

5. Demonstrate knowledge and understanding of fundamental theorem of Galois Theory and its application in solving polynomials by radicals.

Paper II: Advanced Real Analysis I and Advanced Real Analysis II

MMTI-B and MMTII-B

It is a branch of pure Mathematics.

1. It is useful in Statistics, Probability, OR, etc.
2. Students learn about sequences, series of real function.
3. Learn measure & differentiation.

Paper III: Topology I and Topology II

MMTI-C and MMTII-C

1. The properties of space that are preserved under continuous deformation, such as stretching, crumpling & bending, but not learning or gluing.
2. It has great application in various fields of Biology, Computer Science, Physics, Robotics, Games & Puzzles etc.
3. One popular application of Topology
 - **In Biology:** A branch of Topology known as ‘Knot Theory’ is used to study the effects of certain enzymes on DNA.
 - **In Comp. Sc.:** Topological data analysis uses techniques from algebraic topology to determine the large scale structure of a set.
 - **In Robotics:** The various possible positions of a robot can be described by a manifold called configuration space.

Paper IV: Advanced Complex Analysis I and Advanced Complex Analysis II

MMTI-D and MMTII-D

1. It is widely used in Fluid Mechanics and Electrical Engineering.
2. To learn properties of complex number, the importance of R-S integration.
3. To learn about power series.
4. To gain knowledge of singularities and residues.
5. To apply the knowledge of residues in complex integration.

Paper V: Advanced Discrete Mathematics I and Advanced Discrete Mathematics II

MMTI-E and MMTII-E

1. Useful in studying and describing objects and problems in branches of Computer Science, such as computer algorithm, programming language, cryptography, automated theorem proving and software development conversely.
2. Computer implementations are significant in applying ideas from discrete Mathematics to real world problems, such as in “Operation Research”.

M.Sc. III and IV Sem

Paper I: Integration Theory and Functional Analysis I and Integration Theory and Functional Analysis II MMTIII-A and MMTIV-A

1. It is a branch of pure Mathematics.
2. It is useful in Harmonic analysis, Students learn about normed linear space, inner product space, Banach space & Hilbert space.

Paper II: Partial Differential Equation and Mechanics I and Partial Differential Equation and Mechanics II MMTIII-B and MMTIV-B

1. Interpret the resultant data.
2. The ability to approach problems in an analytical & rigorous way.
3. To formulate & apply them to solve problems.

Paper III: Programming in C(with ANSI Features) I and Programming in C(with ANSI Features) II

MMTIII-C and MMTIV-C

1. Demonstrate how to use specific features of the C programming language to write object-oriented programs and handle run-time errors.
2. Explain in a public presentation how user interfaces should be designed to accommodate human physiology and limitations.
3. Explain the processes by which a C programme is compiled.
4. Use appropriate C programming statements to control flow of execution in a C programme.
5. Exercise good programming practices in the design of Programmes.

Paper IV: Operation Research I and Operation Research II MMTIII-D and MMTIV-D

1. Understand used in Industrial Engineering, Network Transportation Problems and Game Theory etc.
2. Learn about PERT and CPM, Decision Theory, Queuing Theory, Optimization techniques
3. It deals with minimization of cost and maximization of profit.
4. Use in Production Engineering, Mathematics of finance, Networking etc.
5. Study Linear Programming Problems.

Paper V: Fuzzy Sets and Its Application I and Fuzzy Sets and Its Application II

MMTIII-E and MMTIV-E

1. Use of fuzzy sets theory in the statistical methods.
2. Analyze statistical data by using fuzzy logic methods.
3. Compare statistical method against fuzzy logic method.
4. Get theory of the statistic fuzzy logic theory together.
5. Evaluate fuzzy statistics applications.
6. After the completion of this course the student will be able
7. To construct the appropriate fuzzy numbers corresponding to uncertain and imprecise collected data.
8. To handle the real world problem in engineering having uncertain and imprecise data. To find the optimal solution of Mathematical programming problems having uncertain and imprecise data.

Course Outcomes:

B.Sc. Part I

Subject: Chemistry

Semester I: Inorganic and Physical Chemistry**CHE101**

Upon successful completion of this subject the student will be able to:

1. To predict the atomic structure, chemical bonding and molecular geometry based on accepted models.
2. To understand atomic theory of matter, composition of atom.
3. To characterize bonding between atoms, molecules, interaction and energetic.
4. To explain hybridization and shapes of atomic, molecular orbitals, bond parameters, bond distances and energies.
5. To get insight into elements in periodic table, physical and chemical characteristics, periodicity.
6. To understand Kinetic model of gas and its properties.
7. To explain behaviour of real gases, its deviation from ideal behaviour, equation of state, isotherm, and law of corresponding states.
8. To get insight into solids, lattice parameters- its calculation, application of symmetry, solid characteristic of simple salts.

Semester II: Organic and Physical Chemistry**CHE201**

Upon successful completion of this subject the student will be able to:

1. Basic of organic molecules, structures, bonding, reactivity and reaction mechanisms.
2. Stereochemistry of organic molecules- conformation and configuration, asymmetric molecules and nomenclature.
3. Aromatic compounds and aromaticity, mechanism of aromatic reactions.
4. Mechanism of organic reactions (effect of nucleophile/leaving group, solvent), substitution vs. elimination.
5. Laws of thermodynamics and concepts
6. Understand the concept of system, variables, heat, work, and laws of thermodynamics.
7. Understand the concept of heat of reactions and use of equations in calculations of bond energy, enthalpy etc.
8. Dilute solution and its properties.
9. Liquid state and its physical properties related to temperature and pressure variation.

Lab I: Inorganic and Physical Chemistry**CHEP101**

At the end of laboratory course the student will be able to do:

1. Titrimetric analysis
2. Surface tension measurement
3. pHmetry
4. Buffer solution
5. Viscosity measurement

LabII: Organic and Physical Chemistry CHEP201

- 1.To analyse the given mixture for anions(acidic radicals) and cations(basic radicals)
- 2.Titrations
- 3.Qualitative analysis
- 4.Transition Temperature
- 5.Surface tension measurement
6. Thermochemistry
- 7.Viscosity measurement

B.Sc.Part II

Subject: Chemistry

Paper I: Inorganic Chemistry

BSCIICH-A

Upon successful completion of this subject the student will be able to:

1. Describe the characteristic properties of d-block elements and elements of first transition series, their binary compounds and complexes.
2. Describe the chemistry of elements of second and third transition series.
3. Describe oxidation and reduction, use of red-ox potential data and red-ox diagrams.
4. Describe coordination chemistry, Werner theory, EAN, chelates, nomenclature, isomerism, VBT.
5. Describe the chemistry of lanthanides and actinides.

6. Describe acids and bases by Arrhenius, bronsted-lowry, Lax-flood, solvent system and Lewis concepts.
7. Describe the properties and reactions of non-aqueous solvents w.r.t liquid ammonia and liquid Sulphur dioxide.

Paper II: Organic Chemistry

BSCIICH-B

Upon successful completion of this subject the student will be able to:

1. Describe the nomenclature, formation & chemical reactions of dihydric and trihydric alcohols and phenols.
2. Describe mechanism of rearrangement reactions, nucleophilic additions to carbonyl group.
3. Describe oxidation and reduction of aldehydes and ketoses.
4. Describe methods of formation & chemical reactions of carboxylic acid and substituted carboxylic acids.
5. Describe reactivity, structure and nomenclature, basicity, structure of amines.
6. Describe Gabriel phthalimide, Hofmann bromamide azo coupling reactions.
7. Describe orbital picture and aromatic character of pyrrole, furan, thiophene and pyridine.
8. Describe preparation and reaction of indole, quinoline and isoquinoline and reaction of indole, quinoline and isoquinoline and electrophilic substitution reactions.

Paper III: Physical Chemistry

BSCIICH-C

Upon successful completion of this subject the student will be able to:

1. Describe fundamentals of thermodynamics system, internal energy, enthalpy, heat capacity of gases at constant volume and constant pressure.

2. Calculate w , q , du & dh for the liquefaction of expansion of ideal gases under isothermal and adiabatic conditions, entropy and entropy change. 3. Apply phase rule to one, two and three component systems.
4. Describe Nerst distribution law, Henry's law and their application.
5. Describe specific and equivalent conductance & effect of dilution on conductance.
6. Describe applications of Kohlrausch's law and theories of strong electrolytes, transport no. and its determination by different methods.
7. Describe electrochemical cell and its conventional representation pH and pKa.
8. Describe corrosion, types, theories and its prevention.

Paper: Lab Course

BSCICH-D

Upon successful completion of this subject the student will be able to:

1. Prepare standard solutions of oxalic acid.
2. Determine % of acetic acid in commercial vinegar using NaOH solutions.
3. Sprats different pigments of spinach using paper chromatography.
4. Determine RF value of organic compound using paper chromatography.
5. Understand effect of temperature on solubility of benzoic acids.
6. Calculate AH of salvation of benzoic acid in water.
7. Perform a laboratory experiment using conventional equipment, instrumentation and techniques and understand the principle well enough to interpret the data collected.

B.Sc. Part- III

Subject: Chemistry

Paper I: Inorganic Chemistry

BSCICH-A

Upon successful completion of this subject the student will be able to:

1. Describe metal- ligands bonding in transition metal complexes crystal field theory.
2. Describe the thermodynamics and kinetic aspect of metal complexes, factor affecting the stability of complexes, substitution reaction in square planar complexes.
3. Describe the magnetic properties of the complexes, determination of magnetic susceptibility, LS coupling, magnetic moments and application of magnetic moment data.
4. Describe the electronic spectra of transitional metal complexes including types of electronic transition, spectroscopic ground state, Orgel diagrams, spectra of hexavalent titanium complex.
5. Describe organometallic chemistry including definition, nomenclature and classification Alkyls and aryls of Li, Al, Hg, Sn and Ti.
6. A brief account of metal- ethylene complexes, homogeneous hydrogenation and mononuclear carbonyl and their nature of bonding.
7. Describe the bio-inorganic chemistry including essential and trace elements in biological system, the hemoglobin and myoglobin, biological role of alkali and alkaline earth metals with special reference to Ca^{2+} and the nitrogen fixation.
8. Classification of acids and bases as hard and soft.
9. Describe HSAB concept, symbiosis and theoretical basis.
10. Describe inorganic polymers - silicon phosphorus.

Paper II: Organic Chemistry

BSCIIICH-B

Upon successful completion of this subject the student will be able to:

1. Describe the formation, structure and chemical reactions of Grignard reagent, organ zinc and organ lithium.
2. Describe the nomenclature, structure formation and reactions of trios, triol ether, euphonic acids, sulph on amides and sulph on guanidine.
3. Describe the organic synthesis via isolates including acidity of alpha hydrogen's, diethyl Malon's and ethyl acetate and their synthesis.
4. Describe the chaise condensation, Kato - Enola, tautomerism, alkylation of 1, 3-dithianes and a Kyla ion - acryl ion of enolates.
5. Classification, nomenclature of carbohydrates, mechanism of oxa zone formation.

6. Describe the inter conversion of glucose & fructose, glucose to mannose, formation of glycosides.
7. Describe mechanism of mutar rotation, structure of ribose & deoxy RI base disaccharides and polysaccharine.
8. Describe the chemistry of fats, oils and detergents including saponification value, iodine value, acid value, soap and detergents.
9. Describe synthetic polymers polymerization such as free radical vinyl, ionic vinyl, Z-N, vinyl polymerization condensation or step polymerization.
10. Describe the polyester, polyamides, phenol formaldehyde resin urea formaldehyde resin, epoxy resin and rubbers.
11. Describe synthetic dyes, their classification and chemistry.
12. chemistry and synthesis of methyl orange , Congo red, malachite green , crystal violet , phenolphthalein , fluoresce in, alizarins and indigo.
13. Describe the absorption spectra including UV absorption spectroscopy, beer's lamberts law and type of electronic transition, concept of chromophores and Auxochrome, different shift.
14. Describe infra-red spectroscopy including type of vibration, hook's law, selection rule, intensity of IR bands, finger print region and characteristic absorption of functional group.
15. Describe the NMR spectroscopy including all parameters such as nuclear shielding, de- shielding, chemical shift, spin-spin splitting coupling.
16. Interpret the PMR spectra of simple organic molecule.

Paper III: Physical Chemistry

BSCIIICH-C

Upon successful completion of this subject the student will be able to:

1. Describe elementary quantum mechanism through black-body radiation, plank's law, photoelectric effect and heat capacity and Bohr model of H-Atom.
2. Describe de-Broglie, hypothesis, uncertainty principle, wave function, Schrodinger wave equation complete.
3. Describe elementary quantum mechanism with reference to molecular orbital theory.
4. Describe the spectroscopy and define its basic and spectrophotometer.
5. Describe the rotational spectrum and Vibration spectrum.
6. Describe the electronic spectrum along with concept of PE curves, frank-Condon principle.
7. Describe the photochemistry, law of photochemistry, Jablonski diagram.

8. Describe the fluorescence, phosphorescence and quantum yield.
9. Describe the physical properties and molecular structure including optical activity, polarization, dipole moment and magnetic properties.
10. Describe the solutions; dilute solution and Colligative properties in details.

Paper Lab Course

BSCIIICH-D

Upon successful completion of this subject the student will be able to:

1. Separate components of binary mixture of organic compounds.
2. Synthesize aspirin and sod. Trioxalato ferrate.
3. Estimate Ba as BaSO₄ gravimetrically.
4. To verify Beer's law and determine the conc. of unknown solution of K₂Cr₂O₇ by using digital photo electric colorimeter.
5. Students will be able to design and carry out scientific experiments as well as accurately record and analyze the results of such experiments.
6. Follow safety procedures and demonstrate proper use of personal protective equipment.

Course Outcomes:

M.Sc. I Sem

Subject: Chemistry

Paper I: Inorganic Chemistry

MCHI-A

Upon successful completion of this subject the student will be able to:

1. Describe VSEPR theory, Walsh diagram, dx-py bonds, Bent's rule and energetic of hybridization, CFT, MOT for octahedral, tetrahedral and square planar complexes.
2. Describe formation constants by spectra photometric and potentiometric methods, factors affecting stability of metal complexes with reference to the nature of metal ion & ligand.
3. Describe preparation, properties and structure of isopoly and heteropoly acid and salts of Mo & W.
4. Draw energy profile of a reaction.
5. Explain kinetics of octahedral substitution and acid and base hydrolysis reactions.
6. Describe inert and labile complexes.
7. Describe higher boranes, Wade's rules, carbonates metalloboranes, metal carbonyl and halide cluster.

8. Draw the structures of borazon & phosphazenes.

Paper II: Organic Chemistry

MCHI-B

Upon successful completion of this subject the student will be able to:

1. Describe nature of bonding in organic molecules.
2. Explain delocalization, Conjugation, cross conjugation, resonance, hyper conjugation and tautomerism.
3. Describe molecular rearrangements e.g. favoroskii, Baeyer - villagers oxidation, Sfork examine, Shapiro reaction etc.
4. Describe thermodynamic and kinetic requirements of reaction.
5. Describe stability & reactivity of reaction intermediates carbonations, free radicals carbines, niters and benzenes.
6. Describe antrafacial and superficial additions.
7. Describe sigma tropic rearrangements
8. Describe elements of symmetry, chirality and methods of resolution.

Describe conformational analysis of cycloalkanes and decaling.

9. Describe stereochemistry of the compounds containing N, S and P.

Paper III: Physical Chemistry

MCHI-C

Upon successful completion of this subject the student will be able to:

1. Describe the postulates of quantum mechanics.
2. Derive the schro dinger equation and apply it to particle in 1-dimensional, 3-dimensinal box, harmonic ascillator and hydrogen atom.
3. Describe the variation and perturbation theory.
4. Describe the concept of laws of thermodynamics, free energy, chemical potential and entropies.
5. Describe non-ideal systems.
6. Describe methods of determining order of reaction, collision theory and activated complex theory.
7. Describe photo chemical chain reaction.
8. Describe surface tension, capillary action.
9. Explain catalytic activity of surfaces and BET equation.
10. Describe theory of strong electrolyte- Debye - huckle theory.
11. Derive Onsager equation and prove its validity.

Paper IV: Spectroscopy I & Group Theory

MCHI-D

Upon successful completion of this subject the student will be able to:

1. Describe phenomenon like absorption, emission, transmission, reflection, dispersion, polarization and scattering.
2. Describe selection rules for rotational, vibrational and Raman-Rotational and Raman- vibrational spectra.
3. Describe effect of isotopic substitution on diatomic & polyatomic molecules' rotational spectra.
4. Describe transition probability and intensity of spectral lines.
5. Describe linear harmonic oscillator, zero point energy, force constant and bond strengths.
6. Explain anharmonicity Morse potential energy diagram.
7. Describe overtones, hot bands and fundamental and combination bands.
8. Describe applications of microwave, IR and Raman spectroscopy.
9. Explain symmetry elements and operations, group, sub groups, contumacy relation classes etc.
10. Depict matrix representation of groups.

Lab Course -1(Inorganic)

MCHI-E

Upon successful completion of this subject the student will be able to:

1. Perform quantitative analysis (separation & determination of two metal ions from solution mixtures) by volumetric and gravimetric methods.
2. Prepare selected inorganic compounds.
3. Identify 8 radicals in a mixture including two less common metal ions by semi micro method.
4. Estimate phosphoric acid in commercial Ortho - phosphoric acid.
5. Estimate boric acid in borax and similar other exercises.

Lab Course -2 (Physical)

MCHI-F

Upon successful completion of this subject the student will be able to:

1. Verify the freundlich and Langmuir isotherms for adsorption of acetic acid or activated charcoal.
2. Study adsorption of oxalic acid on charcoal using KMnO_4 .
3. Study the kinetics of hydrolysis of cane sugar.
4. Determine velocity constant of the hydrolysis of an ester in micelles media.

5. Compare cleaning powers of two samples of detergent.
6. Perform acid base titration in aqueous media using a pH meter.

M.Sc. II Sem

Subject: Chemistry

Paper I: Coordinate Chemistry

MCHII-A

After the completion of the course, the student will be able to-

1. Explain kinetics and mechanisms of ligand substitution reaction in square planar complexes.
2. Explain the Trans effect, electron transfer reaction in inner and outer sphere reaction.
3. Explain electroic spectra of transition metal complexes.
4. Explain term symbols for excited states, microstates.
5. Explain Orgel and Tanabe-Sugano diagrams for transition metal complexes.
6. Explain magnetic properties of transition metal complexes.
7. Explain structure and bonding in metal carbonyls.
8. Explain vibrational spectra, important reaction, preparation metal carbonyls, metal nitrosyl, dinitrogen and dioxygen complexes.
9. Explain anomalous magnetic moments, magnetic exchange coupling and spin crossover.

Paper II: Organic Chemistry

MCHII-B

After the completion of the course, the student will be able to-

1. Explain electrophilic substitution reactions.
2. Explain SE^2 , SE^1 and SE^1 mechanism for aliphatic electrophilic substitution reactions.
3. Explain the ortho/para ratio, ipso attack and orientation in other ring system.
4. Explain nucleophilic substitution reactions.
5. Explain SN^2 , SN^1 , mixed SN^1 and SN^2 and SET mechanism.
6. Explain neighbouring group mechanism and participation by π and σ bonds.
7. Explain $SNAr$, SN^1 , benzyne and SRN^1 mechanism.
8. Explain mechanism and stereo chemical aspects of addition reactions involving electrophiles, nucleophiles and free radicals.
9. Explain type of free radical reactions, free radical substitution mechanism and neighbouring group assistance.
10. Explain the mechanism of addition to Carbon-Hetero multiple bonds such as Aldol, Knoevenagel, Claisen, Mannich, Benzoin, Perkin and Stobbe reactions.
11. Explain E_2 , E_1 and E_1CB mechanism and their spectrum.

Paper III: Physical Chemistry**MCHII-C**

After the completion of the course, the student will be able to-

1. Explain angular momentum, Eigen functions for angular momentum and eigen values of angular momentum.
2. Explain electronic structure of atoms.
3. Explain Russell Saunders term and coupling schemes.
4. Explain magnetic effects-spin-orbit coupling and Zeeman splitting.
5. Explain probability theorem in statistical thermodynamics.
6. Explain Translational, rotational, vibrational and electronic partition function.
7. Explain entropy production and entropy flow.
8. Explain microscopic reversibility and Onsager's reciprocity relations.
9. Explain Kinetics of enzyme reaction.
10. Explain critical micellar concentration and factors affecting the CMC of surfactants.
11. Describe definition and types of polymer.
12. Describe Kinetics of polymerization.
13. Describe molecular mass determination by different methods.
14. Describe polarization and decomposition potential.

Paper IV: Theory & Application of Spectroscopy-II**MCHII-D**

After the completion of the course, the student will be able to-

1. Describe chemical shift and its measurements.
2. Describe factors influencing chemical shift, de-shielding, spin-spin interactions and coupling constant 'J'.
3. Describe NMR spectra of nuclei other than proton ^{13}C , ^{19}F and ^{31}P .
4. Explain Miller indices, Laue Method, Bragg Method and Debye-Scherrer method of X-ray structure analysis of crystals.
5. Describe electron and neutron diffraction.
6. Describe basic principles involved in electron spin Resonance spectroscopy.
7. Explain factors affecting fragmentation and basic principles involved in Mass spectrometry.
8. Describe mass spectra of alkenes, alkenes, aromatic hydrocarbons, alcohols and amines.
9. Explain nitrogen rule, ring rule, molecular weight and formula determination.

Lab Course - 1 (Organic Chemistry)**MCHII-E**

After the completion of the course, the student will be able to-

1. Explain general methods for separation and purification of organic compounds.

2. Explain simple distillation, steam distillation, fractional distillation and distillation under reduced pressure.
3. Separate and identify organic binary mixtures containing two components.
4. Prepare different organic compounds in single step preparation using acetylation, aldol condensation, Bromination, Cannizzaro reaction, Friedel crafts reaction oxidation, Perkin's reaction etc.
5. Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problem.
6. Design and carry out scientific experiments as well as accurately record and analyse the results of such experiments.

Lab Course - 2 (Analytical Chemistry)

MCHII-F

After the completion of the course, the student will be able to-

1. Perform error analysis and statistical data analysis.
2. Explain standard deviation and method of least squares.
3. Perform calibration of volumetric apparatus, burettes, pipettes, weight box etc.
4. Determine iodine and saponification value of oil samples.
5. Determine DO, BOD, COD and hardness of water sample.
6. Determine solubility of inorganic salt in water at different temperature and to plot the solubility method.
7. Determine transition temperature by solubility method.
8. Separate inorganic ions, amino acids, sugars etc. by paper chromatography.
9. Determine basicity of organic acids.
10. Determine degree of hydrolysis and hydrolysis constant of CH_3COONa and NH_4U .
11. Determine cations, anions and metal ions by flame photometry.
12. Verify Beer's law spectrophotometrically.
13. Design and carry out scientific experiments as well as accurately record and analyse the results of such experiments.
14. Skill in problem solving, critical thinking and analytical reasoning as applied to scientific problems.

M.Sc. III Sem

Subject: Chemistry

Paper I: Organotransition Metal Chemistry

MCHIII-A

After completion of the course, the students would be able

1. To understand Nomenclature, Classification, Preparation and Stability of alkyls and aryls of transition metal complexes.
2. To get insight into Fluxional behaviour of organometallic compounds.

3. To explain Nature of bonding, structure and chemical reaction involved in compounds of transition metal- carbon multiple bonds.
4. To describe Nature of bonding and structural features in transition metal pi-complexes.
5. To get insight into Catalysts, types of catalysts and catalytic reaction

Paper II: Natural Products

MCHIII-B

After completion of the course, the students would be able

1. To understand classification , isolation , structure determination , and synthesis of important Terphenoids & carotenoids.
2. To understand role of alkaloids in plants , their synthesis and isolation of alkaloids.
3. To describe Isolation, structure determination & synthesis of important steroids and hormones.
4. To explain occurrence, nomenclature, structure determination & synthesis of important plant pigments & porphyrin.

Paper III: Kinetics, Photo &Solid State Chemistry

MCHIII-C

After completion of the course, the students would be able

1. To understand types of rate equation for composite mechanism.
2. To describe theory of primary and secondary kinetic isotope effects and kinetic solvent effects.
3. To explain fate of excited molecule and determination of reaction mechanism.
4. To get insight into stoichiometry and non stoichiometry defects in crystals.

Paper IV: Spectroscopy

MCHIII-D

After completion of the course, the students would be able

1. To understand instrumentation of UV-visible spectroscopy , various electronic transitions and absorption spectra of some compounds.
2. To gain familiarized with principle and applications of photo electron and photo acoustic spectroscopy
3. To get familiarized with principle and applications of photo electron and photo acoustic spectroscopy
4. To understand the theory, instrumentation and applications of Mossbauer and Flame Emission Spectroscopy.

Lab Course -1 (Organic Chemistry)

MCHIII-E

After the completion of the course, students would be able:

1. To perform multistep synthesis of organic compounds.
2. To perform qualitative organic analysis.
3. To estimate functional group by different methods.
4. To understand extraction of organic compounds from natural sources.

Lab Course -2 (Analytical Chemistry)

MCHIII-F

After the completion of the course, students would be able:

1. To determine different metal ions spectrophotometrically.
2. To understand pH metric and flame photometric determination.
3. To understand different methods for the separation of binary and ternary mixtures.
4. To estimate different elements by different methods.

M.Sc. IV Sem

Subject: Chemistry

Paper I: Bioinorganic Chemistry

MCHIV-A

After completion of this course, the student would be able

1. To get acquainted with role of metal ions in biological processes.
2. To get insight into Bioenergetics and ATP cycle, electron transfer and transport & storage of dioxygen.
3. To understand working of various enzyme and enzyme models.
4. To explain biotechnological applications of enzyme in medicine models.

Paper II: Medicinal Chemistry

MCHIV-B

After completion of this course, the student would be able.

1. To get an idea about development of new drugs and adverse effects of drugs.
2. To understand pharmacokinetics & pharmacodynamics.
3. To describe the properties and synthesis of various antibodies and anti materials.

4. To understand local anti-infective drugs and anti - neoplastic agents.
5. To understand recent development in cancer chemotherapy.

Paper III: Environmental Chemistry

MCHIV-C

After completion of this course, the student would be able.

1. To know about composition of atmosphere, heat budget and biogeochemical cycle.
2. To learn about disposal of waste and their management.
3. To learn about different causes of water pollution and water purification techniques .
4. To gain insight into various air pollutants and their chemistry.
5. To acquire knowledge of green house effect and acid rain.
6. To analyse extent of water pollution by measuring different parameters.

Paper IV: Analytical Chemistry

MCHIV-D

After completion of this course, the student would be able.

1. To have basic idea of role of analytical chemistry.
2. To differential types of error and acquire knowledge to minimize them
3. To gain insight into composition of blood and techniques for the analysis of body fluids.
4. To classify drugs and describe the screening method
5. To have an insight into analysis of various contents of food, adulterants and contaminants in food.
6. To acquits with the type of fluids, analysis of various parameters and calorific value.

Lab Course -1 (Inorganic Chemistry)

MCHIV-E

After the completion of the course, students would be able:

1. To perform analysis of alloys, ores and minerals.
2. To understand inorganic reaction mechanism.
3. To prepare selected inorganic complexes.
4. To understand extraction of chlorophyll from green leaves and complexation study of Cu(II) ion.

Lab Course -2 (Physical Chemistry)

MCHIV-F

After the completion of the course, students would be able to:

1. To determine % efficiency of given counter.

2. To study the effect of temperature, concentration of reactant and catalyst on the rate of a chemical reaction.
3. To get insight into autocatalytic reaction between KMnO_4 and Oxalic acid.
4. To get insight into polarimetry, conductometry, pHmetry and potentiometry.

Course Outcomes:

Name of Programme: B.Sc

Subject: Physics

B.Sc. I

Semester I: Mechanics

PHY101

In this course the student will

1. Vector and scalar multiplication algebraically.
- 2 Different derivatives of a vector with respect to a parameter.
3. To solve first and second order differential equation.
4. Newton's laws of motion, inertial reference frames.
5. Parameters defining the motion of mechanical system and equation of motion.
6. Concept of work, energy, centers of mass and conservation principles.
7. Newton's Law of Gravitation, Motion of a particle in a central force field, Rocketry motion.
8. Satellite motion, Basic idea of global positioning system (GPS).
9. Simple harmonic motion.
10. Basic concepts of special theory of relativity.

Semester II: Electricity and Magnetism

PHY201

The course will enable the students to:

1. Understand the basic idea about electrostatic field and electric flux.
2. Learn the problem related to electric field.
3. Use electric potential equation to solve the problems.
4. Learn problem related to dipole. Understand Gauss's theorem.
5. Understand the sources of capacitance.
6. Understand the concept and properties of electrostatic field.

7. Understand about magnetism. Biot-Savart's law & its applications.
8. Understand about different magnetic materials.
9. Understand about Electromagnetic waves.

Lab I: Mechanics PHYP101

Vector and scalar multiplication algebraically.

- 2 Different derivatives of a vector with respect to a parameter.
3. To solve first and second order differential equation.
4. Newton's laws of motion, inertial reference frames.
5. Parameters defining the motion of mechanical system and equation of motion.
6. Concept of work, energy, centers of mass and conservation principles.
7. Newton's Law of Gravitation, Motion of a particle in a central force field, Rocketry motion.
8. Satellite motion, Basic idea of global positioning system (GPS).
9. Simple harmonic motion.
10. Basic concepts of special theory of relativity.

Lab II: Electricity and Magnetism

PHYP201

Understand the basic idea about electrostatic field and electric flux.

10. Learn the problem related to electric field.
11. Use electric potential equation to solve the problems.
12. Learn problem related to dipole. Understand Gauss's theorem.
13. Understand the sources of capacitance.
14. Understand the concept and properties of electrostatic field.
15. Understand about magnetism. Biot-Savart's law & its applications.
16. Understand about different magnetic materials.
17. Understand about Electromagnetic waves.

Subject: Physics

B.Sc. II

Paper I: Thermodynamics, Kinetic Theory and Statistical Physics

BSCIIPH-A

In this course the student will

1. Understand the basic applications of thermodynamics.

2. Understand the basic statistical methods and concepts like probability, random variables and common probability distributions.
3. Understand the relation between microscopic and macroscopic description through statistical mechanics; know and can apply the laws of thermodynamics and principles of free energy.
4. describe thermodynamic processes and heat engines and master the use of
5. the chemical potential to describe diffusive equilibrium, phase equilibrium and chemical processes.
6. Understand the efficiency of Carnot's engine and the significance of first law and second of thermodynamics and implications of the second law of thermodynamics and limitations placed by the second law on the performance of thermodynamic systems.
7. Ability to evaluate entropy changes in a wide range of processes and determine the reversibility or irreversibility of a process from such calculations.
8. Understand the interrelationship between thermodynamic functions and ability to use such relationships to solve practical problems.

Subject: PhysicsB.Sc.

II

Paper II: Waves, Acaustics and Optics

BSCIIPH-B

In this course the student will

1. Understand the concepts of waves, acoustics and the properties of matter.
2. Ability to recognize and use a mathematical oscillator equation and wave equation, and derive these equations for certain systems, point out the limitations and be able to refer to very different solutions of identical oscillator equations due to different initial and boundary conditions.
3. Understand how several waves or parts of waves interact, and be able to calculate and analyze diffraction and interference phenomena, and explain the conditions required for such phenomena to appear.
4. Able to calculate what happens when waves move from one medium to another, and be able to explain dispersion and group and phase velocity.
5. Understand different types of diffraction.
6. Able to solve wave equation and understand significance of transverse waves and longitudinal waves.
7. Gain knowledge on applications of laser systems.
8. Understand application of acoustics in noise and music, musical scale, sonar and ultrasonic.

Practical

Work

BSCIIPH-C

1. Students will develop a quality of a new perspective to look at everything from 'Physics' point of view.

2. Students will develop a quality of understanding of basic and advanced concepts in Physics Theoretical and practical skills along with problem solving ability.
3. Student will be able to understand to use grating for finding the wavelength of different light sources.
4. Students will be able to find the resolving power of telescope and plane diffraction grating.
5. The course provides the students about the knowledge of different parameters like resonance frequency , thermal efficiency and adiabatic coefficient etc.
6. Students will be able to learn programming in C language and various components of programming viz., compilation and execution of programmes. . They will also expertise in practical implementation of programming in numerical analysis methods.

B.Sc. III

Paper I: Relativity,Quantum Mechanics,Atomic, Molecular and Nuclear Physics

BSCIIPH-A

In this course the student will

1. Understand the origins of quantum mechanics
2. Understand and explain the differences between classical and quantum mechanics
3. Understand the idea of wave function
4. Understand the uncertainty relations
5. Understand the Schrödinger wave mechanics and operator formalism
6. Solve the Schrödinger equation for simple 1D time-independent potentials
7. Develop the idea of spin other quantum numbers.
8. Understand the ideas of basics of nucleus and their energy.
9. Understand the procedures for nuclear fission and fusion.
10. Understand the relationship between various types of spectral terms.
11. Ability to have insight into the interplay between theory, models, and data from modern experiments and into how the major open questions are being addressed.
12. A basic understanding of nuclear properties and models that describe the quantum structure, decay, and reactions of nuclei.

Course Outcomes:

Name of Programme:

B.Sc Subject: PhysicsB.Sc.

III

In this course the student will

1. Understand the basic concepts of force between atoms and bonding between molecules.
 2. Understanding of diffraction experiment and reciprocal lattice
 3. Understand free electron Fermi gas: density of states, Fermi level, and electrical conductivity
 4. Understand electrons in periodic potential: energy bands theory classification of metals, semiconductors and insulators
 5. Understand the properties of semi-conductors
 6. Understand the relationship between semiconductors devices and understand the applications of semiconductor devices
 7. Understand the properties of semi-conductors.
 8. Understand the basics of diode and working of rectifier circuits and its characteristics.
 9. Understand the relationship between semiconductors devices and understand the applications of semiconductor devices.
10. To have a basic introduction to computer organisation.

Practical Work**BSCIIPH-C**

1. Students will develop a quality of a new perspective to look at everything from 'Physics' point of view.
2. Students will develop a quality of understanding of basic and advanced concepts in Physics Theoretical and practical skills along with problem solving ability.
3. Student will be able to observe the characteristics curves of tunnel diode and transistors in different modes.
4. Students will be able to learn the usage of the cathode ray oscilloscope by observing different lissajous figures.
5. Students will learn to use VTVM for measuring different parameters.

Course Outcomes:**M.Sc. I Sem****Subject: Physics****Paper I: Mathematical Physics****MPHI-A**

In this course the student will

1. Learn about complex variables and their typical applications in physics.
2. Learn about special type of matrices that are relevant in physics and then learn about their properties.
3. Get introduced to Special functions like Gamma function, Beta function, Delta function, Dirac delta function, Bessel functions and their recurrence relations
4. Learn different ways of solving second order differential equations and familiarized with singular points and contour integration method.
5. Learn the fundamentals and applications of Fourier series, Fourier and Laplace transforms, their inverse transforms etc

Course Outcomes:

M.Sc. I Sem

Subject: Physics

Paper II: Classical Mechanics

MPHI-B

This paper enables the students to understand

1. The Lagrangian and Hamiltonian approaches in classical mechanics.
2. The classical background of Quantum mechanics and get familiarized with Poisson brackets and Hamilton -Jacobi equation.
3. Kinematics and Dynamics of rigid body in detail and ideas regarding Euler's equations of motion.
4. Theory of small oscillations in detail along with basis of free vibrations.
5. Basic ideas about central forces and scattering.

Course Outcomes:

M.Sc. I Sem

Subject: Physics

Paper III: Electrodynamics and Plasma Physics

MPHI-C

After successful completion of the course, the student is expected to:

1. Have gained a clear understanding of Maxwell's equations and electromagnetic boundary conditions.

2. Know about the radiations related to the motion of charges.
3. Have grasped the idea of bremsstrahlung and synchrotron radiation.
4. Extend their understanding of plasma related concepts.
5. Understand the rather complex physical phenomena and elementary concepts of plasma kinetic theory observed in plasma.

Course Outcomes:

M.Sc. I Sem

Subject: Physics

Paper IV: Electronics

MPHI-D

On successful completion of course student will:

1. Acquire knowledge of operational amplifier circuits and their applications.
2. Gain knowledge and evaluate the Boolean expressions, combinational logic circuits and simplifications using karnaugh maps.
3. Analyse the operation of different logic families.
4. Understand the working of latches, flip-flops, designing registers, counters, a/d and d/a converters.
5. Design and Analyse synchronous and asynchronous sequential circuits.
6. Interpret the architecture, instruction set and also practice the basic programs of 8085 microprocessor.

Lab Course I-A: General and Optics

MPHI-E

1. Students will acquire an understanding of basic and advanced concepts in Physics.
2. Students will have a knowledge of theoretical and practical skills along with problem solving ability Logical and abstract thinking and analytical approach.
3. The students will gain the practical knowledge of principles of general optics.
4. The students will have the knowledge of measurement of different physical quantities.
5. Student will learn to determine the band gap of semiconductors.
6. Student will have knowledge about transmission line.
7. Student will learn about the determination of ionization potential of mercury lamp.

Lab Course I –B: Electronics

MPHI-F

1. Students will acquire an understanding of basic and advanced concepts in Physics.
2. Students will have a knowledge of theoretical and practical skills along with problem solving ability Logical and abstract thinking and analytical approach.
3. Student will learn to design and study regulated power supply.
4. Student will have knowledge about the astable, monostable and bistable multivibrators.
5. Students will learn about the basic logic gates and verification of their truth tables.

Course Outcomes:

M.Sc. II Sem

Subject: Physics

Paper I: Quantum Mechanics

MPHII-A

After successful completion of this paper, the student will be well-versed in

1. Linear vector spaces, Hilbert space, concepts of basis and operators and bra and ket notation
2. Both Schrödinger and Heisenberg formulations of time development and their applications
3. Theory of time independent perturbation theory and solutions of schrodinger equations.
4. To learn about the inadequacy of classical mechanics and the emergence of quantum physics.
5. Theory of central force problem and to solve the wave equations .

Paper II: Statistical Mechanics

MPHII-B

The students should be able to

1. Explain statistical physics and thermodynamics as logical consequences of the postulates of statistical mechanics
2. Apply the principles of statistical mechanics to selected problems
3. Grasp the basis of ensemble approach in statistical mechanics to a range of situations
4. To learn the fundamental differences between classical and quantum statistics and learn about quantum statistical distribution laws
5. Study important examples of ideal Bose systems and Fermi systems

6. Gain knowledge about classical and quantum statistical mechanics, including Boltzmann, Fermi-Dirac, and Bose-Einstein statistics.
7. Apply the formalism of statistical mechanics and probability theory to derive relations between thermos-dynamical quantities
8. broad understanding of Statistical Mechanics, and show a critical awareness of the significance and importance of the topics, methods and techniques.
9. Understand the physical statistics and its relation to information theory and able to Solve statistical mechanics problems for simple non-interacting systems.

Paper III: Electronic and Photonic Devices and Optical Modulators MPHII-C On successful completion of course student will:

1. Acquire the basic knowledge of bipolar devices and its application
2. Gain knowledge on characteristics of diodes.
3. Understand digital terminology and characteristics of unipolar devices.
4. Study of characteristics of special microwave devices.
5. Study the different photonic devices and their structure and working principle.
6. Understand, analyse and design p-n junction solar cell and interface thin film solar cell.
7. Gain knowledge about the optical modulators and their properties.

Paper IV: Computational Physics and Computer Programming

MPHII-D

The students should be able to,

1. Have a strong base in FORTRAN language regarding different data type such as list, sets, functions etc.
2. It helps to understand the different methods of determining zeroes of the equations.
3. Understand different interpolation and integration and differentiation techniques. methods
4. Gets a wide knowledge of numerical methods in computational Physics that can be used to solve many problems which does not have an analytic solution

5. Solve problems related to ordinary differential equations using Rungakutta method and predictor corrector methods.

Lab Course –II- A Numerical Analysis and Computer Programming

MPHII-E

1. Students will be able to learn programming in fortran language and various components of programming viz., compilation and execution of programmes. . They will also expertise in practical implementation of programming in numerical analysis methods.
2. Student will learn to use fortran language to solve simultaneous linear equations by gauss elimination method and gauss siedal method.
3. Student will learn to find the roots of transcendental equation using fortran language by newton raphson method.
4. Student will understand the use of fortran language to find the numerical integration by simpson's rule and trapezoidal rule.
5. Student will learn to write fortran programs to find eigen values of different matrices.

Lab Course –II- B Digital Electronics and Microprocessor

MPHII-F

1. Students will acquire an understanding of basic and advanced concepts in Physics.
2. Students will have a knowledge of theoretical and practical skills along with problem solving ability Logical and abstract thinking and analytical approach.
3. Student will have knowledge about different types of flip-flops; RS flipflop,JKflipflop,Master slave flipflop.
4. Student will learn about counters(Ripple counters,mode 3,mode 5 counters).
5. Student will learn the programming in 8085 microprocessor for addition of two 16 bit hexadecimal numbers,to find the parity of numbers.

M.Sc. III Semester

Paper I: Quantum Mechanics II

MPHIII-A

On successful completion of course student will:

1. Understand the kinematics of scattering process.
2. Evaluate the partial wave analysis using Born approximation method.
3. Apply time Independent perturbation theory for non-degenerate case.
4. Gain knowledge on WKB approximation method to study turning points.
5. Remember time dependent perturbation theory .

6. Analyse the interaction of an atom with electromagnetic radiation and the relativistic quantum mechanics using Klein Gordon equation
7. Explore the properties of Dirac particle.

Paper II: Atomic and Molecular Physics

MPHIII-B

After successful completion of the course, the student is expected to :

1. Know about different atom model and will be able to differentiate different atomic systems, different coupling schemes and their interactions with magnetic and electric fields.
2. Have gained ability to apply the techniques of spectroscopy to elucidate the structure of molecules
3. Be able to apply the principle of Raman spectroscopy and its applications in the different field of science & Technology.
4. To become familiar with different types of molecules and their rotational and vibrational spectra.
5. To find solutions to problems related different spectroscopic terms.

Paper III: Solid State Physics-I

MPHIII-C

On successful completion of course student will:

1. Understand different types of crystal structures in terms of the crystal lattice and the basis of constituent atoms.
2. Understand the theory of X-ray diffraction in the reciprocal lattice (k-space) formalism.
3. Apply the theory of lattice vibrations (phonons) to determine thermal properties of solids.
4. Study the problem of electrons in a periodic potential, examine its consequence on the band-structure of the solids.
5. Gain knowledge about the different properties of semiconductor crystals.

Paper IV: Electronics III

MPHIII-D

On successful completion of course student will:

1. Know about Number systems and codes and understand Logic gates,
2. laws of Boolean algebra and De Morgan's Theorem.
3. Acquire Knowledge about Karnaugh Map, Arithmetic circuits.
4. Know about different Logic families and Data processing Circuits.
5. Acquire Knowledge about Sequential circuits as Flipflops, Counters and Shift registers.
6. Understand Digital to Analog and Analog to Digital converters and details of Digital Integrated Circuits.

Lab Course III A: Digital Electronics and Microprocessor

MPHIII-E

On successful completion of course student will:

1. Know about Number systems and codes and understand Logic gates,
2. laws of Boolean algebra and De Morgan's Theorem.
3. Acquire Knowledge about Karnaugh Map, Arithmetic circuits.
4. Know about different Logic families and Data processing Circuits.
5. Acquire Knowledge about Sequential circuits as Flipflops, Counters and Shift registers.
6. Understand Digital to Analog and Analog to Digital converters and details of Digital Integrated Circuits.

Lab Course III B: Digital Electronics and Microprocessor

MPHIII-F

On successful completion of course student will:

1. Know about Number systems and codes and understand Logic gates,
2. laws of Boolean algebra and De Morgan's Theorem.
3. Acquire Knowledge about Karnaugh Map, Arithmetic circuits.
4. Know about different Logic families and Data processing Circuits.
5. Acquire Knowledge about Sequential circuits as Flipflops, Counters and Shift registers.
6. Understand Digital to Analog and Analog to Digital converters and details of Digital Integrated Circuits.

M.Sc. IV Semester

Paper I: Nuclear and Particle Physics

MPHIV-A

On successful completion of course student will:

1. Understand Nuclear Force And Nuclear Models
2. Analyse the semi empirical mass formula and its applications using liquid drop model and shell model.
3. Understand the concept of Nuclear Decay Processes
4. Interpret the Classification of nuclear reactions
5. Understand the Classification of elementary Particles and their Quantum Numbers

Paper II: Laser Physics and Applications

MPHIV-B

On successful completion of course student will:

1. Gain knowledge on laser rate equations for Two, Three, Four-level laser systems.
2. Understand Einstein relations for emission and absorption of radiation
3. Gain knowledge on classification of laser systems
4. Gain knowledge on application of various laser systems
5. Understand basic principles of lasing action and its applications

Paper III: Solid State Physics II

MPHIV-C

On successful completion of course student will:

1. Acquire knowledge about different experimental approaches in the study of plasmons and polaritons .
2. Understand piezo, pyro and Ferro electricity, ferroelectric domains and hysteresis.
3. Understand basic theories of magnetic materials like ferromagnetism, ferrimagnetism, anti-ferromagnetism.
4. Acquire basic knowledge on curie point and curie temperature.
5. Understanding of various optical processes and excitons and defects.

Paper IV: Electronics IV

MPHIV-D

On successful completion of course student will:

1. Know about evolution of Microprocessor and Micro Computers and different types of Memories.
2. Acquire knowledge about Architecture of microprocessor 8085, Instruction cycles and Timing diagrams.
3. Know about Addressing Modes and Instruction set of 8085 pp. Learn types of different languages, Modular and Structured Programming.
4. Know about Assembly Language Programming of 8085 VIP.
5. Acquire knowledge about Optical Fibers and their types.

Project

MPHIV-E

Students will acquire an understanding of basic and advanced concepts in Physics. Students will have a knowledge of theoretical and practical skills along with problem solving ability Logical and abstract thinking and analytical approach. The project will rise the students intellectual level and will inculcate the observing and research qualities in their personality.

Course Outcomes:

Name of Programme: B.Sc

Subject: Zoology

B.Sc. I

Upon successful completion of this subject the student will be able to:

1. Understand the structure and organization of invertebrate animals.
2. Explain modifications in various functions of animals during transition from invertebrates to vertebrates.
3. Identify invertebrates and homology, analogy and modification of mouthparts in relation to feeding habits, respiration, excretion, locomotion.
4. Understand the functioning of nucleus and extra nuclear organelles and understand the intricate cellular mechanism involved.
5. Acquire the detailed knowledge of different pathways related to cell signalling and apoptosis.

Paper II: Comparative Anatomy and Physiology of Vertebrates ZOO201

Upon successful completion of this subject the student will be able to know about:

1. Have an enhanced knowledge and appreciation of mammalian physiology.
2. Understand the function of important physiological systems including the cardio-respiratory, renal, reproductive and metabolic systems
3. Understand how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude and how they can sometimes fail

Lab I:

ZOOP101

1. Identification, classification and the study of distinguishing features of important representatives from various groups (Protozoa to hemichordata)
2. Stud of permanent prepared slides(Protozoa to hemichordata)
3. Alternative method of
4. Major Dissection, Reproductive excretory, nervous and earthworm
5. Nervous system of Pila.
6. Minor Dissection – mouth parts of cockroach house fly and mosquito, hastate plat of prawn, Radula of pila.
7. Slide Presentations of setae, septal Nephridia sporidium and ctenidium.
8. Permanent preparations of different materials to be provided for study.

Lab II:

ZOOP201

After the completion of the course, the student will be able to know-

1. **Identification, classification and the study of distinguishing features of important representatives, museum specimens and slides (chordates)**
2. Comparative studies of integument, reproductive system with the help of chart and Model 3.
Alternative method of dissection- cranial nerves of frog, veranus, fowl and rabbit.
4. **Osteology of Amphibia, aves, Reptile and Mammals.**
5. **Temporary mount of external scales in fishes (cycloid, ganoid, ctenoid).**
6. **Comparative study of brain with the help of models and charts.**
7. **Comparative study of urinogenital system with the help of models and charts.**
8. **Comparative study of heart with the help of models and charts.**
9. Estimation of RBC, Haemoglobin, blood group and Rh factor blood clotting time.
Preparation of haemin crystals.
10. Determine the blood pressure of man.
11. Demonstration of action of salivary analyse
12. Demonstration of urea, glucose and ketone bodies in urine.
13. Demonstration of osmosis.
14. **Permanent preparations of slides and its identification.**

B.Sc. II

Paper I: Anatomy and Physiology

BSCIIZO-A

After the completion of the course, the student will be able to gain-

1. Knowledge of the anatomical and physiological similarities and dissimilarities of vertebrate animals by comparative study.

Paper II Vertebrate Endocrinology, Reproductive Biology, Behaviour, Evolution and Applied Zoology

BSCIIZO-B

After the completion of the course, the student will be able to know-

1. About the endocrine glands, hormones and mechanism of their action.
2. Different evidences and theories of organic evolution.
3. The behavioural patterns in animals.
4. Economically important animal culture practices.

Practical Work:

BSCIIZO-C

After the completion of the course, the student will be able to know-

1. Anatomical study of different Invertebrates and Vertebrates animals by Museum Specimens and Slides.
2. The Skeletal system by viewing the bones of vertebrates.
3. Life Cycle of Honey Bee and Silkworm.

B.Sc. III

Paper I: Ecology, Environmental Biology, Toxicology, Microbiology and Medical Zoology

BSCIIIZO-A

After the completion of the course, the student will be able to know-

1. About the major ecosystems of world, characteristics of population, type of pollution and their regulation, conservation of natural resources.
2. Different type of chemical and biological toxicants, their effects and prevention.
3. Importance of Microorganism.
4. Study of Pathogenic animals, diseases and their symptoms and preventions.

Paper II: Genetics, Cell Physiology, Biochemistry, Biotechnology and Bio-techniques

BSCIIIZO-B

After the completion of the course, the student will be able to know about-

1. The Human Genetics
2. Physiological functions of cells.
3. Different Bio-molecules and their metabolism.
4. Different Genetical Engineering Techniques.
5. Different Bio-Instrumental techniques.

PracticalWork:

BSCIIIZO-C

After the completion of the course, the student will be able to know about-

1. Blood group detection and RBC counting methods.
2. Estimation of Population Density.
3. Identification of bacteria.

Course Outcomes:

Name of Programme: M.Sc. in Zoology

M.Sc. I Sem

Paper I: Biosystemics, Taxonomy and Biodiversity

MZOI-A

After the completion of the course, the student will be able to -

- Understand, classify and identify the diversity of animals.□
- Understanding of general taxonomic rules on animal classification□
- The importance of classification of animals and classify them effectively using the six levels of classification. □
- Understand Mechanism of Speciation.□
- Understand the Animal diversity around us - Hot Spots ,Threats and Conservation□
- Biodiversity and Conservation increase awareness and understanding of how human life depends on preserving animal species and natural ecosystems□
- Apply the International rules of Nomenclature to give a scientific name to animals which are found during research.□

Paper II-Structure and function of Invertebrates

MZOI-B

After the completion of the course, the student will be able to -

- Understand the life cycle of Invertebrate animal of Different Phylum .□
- Understand the structure and organization of invertebrate animals.□

- Identify invertebrates and homology, analogy and modifications of mouthparts in relation to feeding habits.□
- Students will have the knowledge and skills to: Describe the variety of invertebrate organisms and explain their evolutionary origin and diversification. Investigate invertebrates in laboratory and field conditions, and identify major taxonomic groups.□

Paper III-Population genetics and Evolution

MZOI-C

After the completion of the course, the student will be able to understand -

- The origin of life□
- Evidences of Evolution Destabilizing forces-for evolution like Mutation, variation, Isolation, Genetic Drift.□
- Mode of Speciation□
- Formation and types of Fossils.□
- The students will be able to learn most of the essential aspects of Evolutionary Biology in detail which will help them in getting better understanding regarding the subject.□
- Understand the gradual development and evolutionary history of different kinds of living organisms from earlier forms over several generations□

Paper IV- techniques in Biology

MZOI-D

After the completion of the course, the student will be able to understand-

- Different techniques-phmetery,colorimetry, spectrophotometry.-□
- Different types of Microscopies.□
- Radio Isotopes Technique.□
- Magnetic resonance Imaging.□
- Separation techniques-Centrifugation,Chromatography,Electrophoresis□

- Students gain skills in techniques of chromatography, electrophoresis, spectroscopy and radioisotopes. □

Lab Course I: Based on Paper I and II

MZOI-E

After the completion of the course, the student will be able to -

- Understand, classify and identify the diversity of animals. □
- Understanding of general taxonomic rules on animal classification □
- The importance of classification of animals and classify them effectively using the six levels of □ classification.
- Understand Mechanism of □ Speciation.
- Understand the Animal diversity around us - Hot Spots ,Threats and Conservation □
- Biodiversity and Conservation increase awareness and understanding of how human life depends on preserving animal species and natural ecosystems □
- Apply the International rules of Nomenclature to give a scientific name to animals which are found during research. □
- Understand the life cycle of Invertebrate animal of Different Phylum . □
- Understand the structure and organization of invertebrate animals. □
- Identify invertebrates and homology, analogy and modifications of mouthparts in relation to feeding habits. □
- Students will have the knowledge and skills to: Describe the variety of invertebrate organisms and explain their evolutionary origin and diversification. Investigate invertebrates in laboratory and field conditions, and identify major taxonomic groups. □

Lab Course II: Based on Paper III and IV

MZOI-F

After the completion of the course, the student will be able to understand -

- The origin of life □
- Evidences of Evolution Destabilizing forces-for evolution like Mutation, variation, Isolation, Genetic Drift. □
- Mode of Speciation □
- Formation and types of Fossils. □
- The students will be able to learn most of the essential aspects of Evolutionary Biology in detail which will help them in getting better understanding regarding the subject. □
Understand the gradual development and evolutionary history of different kinds of living organisms from earlier forms over several generations
- Different techniques-phmetery,colorimetry, spectrophotometry.-□
- Different types of Microscopies. □
- Radio Isotopes Technique. □
- Magnetic resonance Imaging. □
- Separation techniques-Centrifugation,Chromatography,Electrophoresis □
- Students gain skills in techniques of chromatography, electrophoresis, spectroscopy and radioisotopes. □

Semester II

Paper I- Comparative Anatomy of Vertebrates

MZOII-A

After the completion of the course, the student will be able to -

- Gain knowledge the comparative anatomy of vertebrate Understanding of origin and salient features of Amphibians, Reptiles, birds and Mammals . □
- Gain knowledge of functional anatomy of vertebrates from fishes to mammals. □

- Gain Knowledge of Origin, Evolution and general organisation of Chordates. □
- Gain Knowledge of Evolution of heart , lungs and urino-genital organs of vertebrates □
- Gain Knowledge of comparative anatomy of all systems of vertebrates. □

Paper II- Physiology of Vertebrates

MZOII-B

After the completion of the course, the student will be able to understand -

- Detailed concepts of digestion respiration excretion the functioning of nerves and muscles. blood coagulation □
- About neurophysiology and Different types Receptor Physiology □
 - • Communication
 - • Thermoregulation
- The students will be well equipped to become very competent in research. □
- The course provides employability in teaching fields □
- Students feel confident in teaching physiology as well as executing research projects. □
- Students will gain skill to execute the roles of a medical lab technicians with training as they have basic fundamentals. □

Paper III-Molecular Cell Biology and Biotechnology

MZOII-C

After the completion of the course, the student will be able to understand -

- Molecular - structure and function of Nucleus and Chromosome. □
- Structure and types of DNA. □
- Transportation of Biomolecules across biomembrane. □
- Cell cycle –mitosis and meiosis. □
- Cell cycle control in mammalian cell. □
- 3. Apoptosis-Mechanism and regulation □

- DNA-Replication Transcription Translation Regulation of translation in □ •
PCR Technology. □

•

R-DNA Technology. DNA Foot Printing□

- It gives insight into various cell/tissues culture techniques□
- Understanding of in vitro culturing of organisms and production of transgenic animals.□
- Understanding of cloning of mammals, large scale culture and production from recombinant microorganisms□
- Students Gains skills in medical, environmental biotechnology, biopesticides.□
- This insight allows students to take into consideration about ethical issues involved in production transgenic animals.□

Paper IV-Quantitative Biology (Computer and Biostatistics) MZOII-D

Students gain knowledge about various tools & techniques used in biological systems

- Biostatistics teaches them to use the best data analysis methods in their research projects□
- Students gains knowledge about statistical methods like measures of central tendencies, Probability□
- Learns about hypothesis testing and inferential □ statistics
- Analyse biological data mathematically and □ statistically

Lab Course I: Based on Paper I and II

MZOII-E

After the completion of the course, the student will be able to -

-
- Gain knowledge the comparative anatomy of vertebrate Understanding of origin and salient features of Amphibians, Reptiles, birds and Mammals .□
- Gain knowledge of functional anatomy of vertebrates from fishes to mammals.□
Gain Knowledge of Origin, Evolution and general organisation of Chordates. □
- Gain Knowledge of Evolution of heart , lungs and urino-genital organs of vertebrates□
- Gain Knowledge of comparative anatomy of all systems of vertebrates.□
- Detailed concepts of digestion respiration excretion the functioning of nerves and muscles. blood coagulation□
- About neurophysiology and Different types Receptor Physiology□
 - • Communication
 - • Thermoregulation
- The students will be well equipped to become very competent in research.□
- The course provides employability in teaching fields□
- Students feel confident in teaching physiology as well as executing research projects.□
- Students will gain skill to execute the roles of a medical lab technicians with training as they have basic fundamentals.□

Lab Course II: Based on Paper III and IV

MZOII-F

After the completion of the course, the student will be able to understand -

- Molecular - structure and function of Nucleus and Chromosome.□
- Structure and types of DNA.□

-
- Transportation of Biomolecules across biomembrane.□
- Cell cycle –mitosis and meiosis.□
- Cell cycle control in mammalian cell.□
- 3. Apoptosis-Mechanism and regulation□
- DNA-Replication Transcription Translation Regulation of translation in □ •
PCR Technology.□
- R-DNA Technology. DNA Foot Printing□
It gives insight into various cell/tissues culture techniques□
- Understanding of in vitro culturing of organisms and production of transgenic animals.□
- Understanding of cloning of mammals, large scale culture and production from recombinant microorganisms□
- Students Gains skills in medical, environmental
biotechnology, biopesticides.□
- This insight allows students to take into consideration about ethical issues involved in production transgenic animals.□
- Biostatistics teaches them to use the best data analysis methods in their research projects□
- Students gains knowledge about statistical methods like measures of central tendencies, Probability□
- Learns about hypothesis testing and inferential statistics Analyse Biological data mathematically and statistically□

Semester III

PaperI–Reproductive Physiology and Embryology

MZOIII-A

After the completion of the course, the student will be able to-

- Develop the basic concepts of development.□
- Explain the fundamental concept of Oogenesis spermatogenesis.□

-
- Explain the fundamental concept Female reproductive cycle.□
- development of extra embryonic membrane and the nature and physiology of placenta.□
- Provides students insight into maintaining healthy relationships with their opposite gender and allows them to make right choice about their life partner thus preventing congenital/consanguial diseases.□

Paper II Animal behavior-

MZOIII-B

After the completion of the course, the student will be able to understand -

- In detail about patterns of behaviours-instinct and learning.□
- Chronobiology, orientation, migration.□
- Animal communication-design of signals□
- Reproductive behaviour□
- Social and cooperative behaviours.□
- The basic ecological and evolutionary processes that shape animal behaviour□
- The relevance of animal behaviour, both as a biologist and a human being.□
- Improve quantitative skills in the application of mathematical models and theories to the study of animal behaviour.□
- Further develop the ability to apply critical thinking and logic to the solving of biological problems relating to animal behaviour.□
- Student Gains skills in Wildlife technicianAnimal services associateVeterinaryassistant.Animal adoption specialistResearch technician□

Paper III-Environmental Physiology

MZOIII-C

After the completion of the course, the student will be able to understand -

- In detail about different types of ecological adaptation in animals.□
- Basic concept of environmental stress.□
- The methods of relaxation of Stress and body by Yoga, Meditation, Asana &Pranayam□
- Understanding of stress physiology will allow them to control their stress and emotions there by diverting their energy towards the positive nation building activities□

PaperIV-Icthyology

MZOIII-D

After the completion of the course, the student will be able to understand -

- Integumentary system - basic structure of skin, dermal and epidermal pigments, fins, and scales. □
- Fishes habits and habitats and their functional anatomy • The functional anatomy of all organ systems of fish • Migration and adaptations in fishes. □
- Importance of electric organs in fishes. □
- The significance of Colouration, luminous and poisonous organs of fish. □
- Identify fish by morph metric and meristic characters and apply the method in biodiversity oriented research. □

Lab Work I: Based on Paper I and II

MZOIII-E

After the completion of the course, the student will be able to-

- Develop the basic concepts of development. □
- Explain the fundamental concept of Oogenesis spermatogenesis. □
- Explain the fundamental concept Female reproductive cycle. □
- development of extra embryonic membrane and the nature and physiology of placenta. □
- Provides students insight into maintaining healthy relationships with their opposite gender and allows them to make right choice about their life partner thus preventing congenital/consanguial diseases. □
- In detail about patterns of behaviours-instinct and learning. □
- Chronobiology, orientation, migration. □
- Animal communication-design of signals □
- Reproductive behaviour □
- Social and cooperative behaviours. □
- The basic ecological and evolutionary processes that shape animal behaviour □
- The relevance of animal behaviour, both as a biologist and a human being. □

- - Improve quantitative skills in the application of mathematical models and theories to the study of animal behaviour. □
 - Further develop the ability to apply critical thinking and logic to the solving of biological problems relating to animal behaviour. □
- Student Gains skills in Wildlife technician Animal services
 associate Veterinary assistant. Animal adoption specialist Research technician □

Lab Work II: Based on Paper III and IV

MZOIII-F

After the completion of the course, the student will be able to understand -

- In detail about different types of ecological adaptation in animals. □
 - Basic concept of environmental stress. □
 - The methods of relaxation of Stress and body by Yoga, Meditation, Asana & Pranayam □
 - Understanding of stress physiology will allow them to control their stress and emotions there by diverting their energy towards the positive nation building activities □
-
- Integumentary system - basic structure of skin, dermal and epidermal pigments, fins, and scales. □
 - Fishes habits and habitats and their functional anatomy • The functional anatomy of all organ systems of fish • Migration and adaptations in fishes. □
 - Importance of electric organs in fishes. □
 - The significance of Colouration, luminous and poisonous organs of fish. □

- Identify fish by morph metric and meristic characters and apply the method in biodiversity oriented research. □

Semester IV

Paper I- Biology of Immune System

MZOIV-A

After the completion of the course, the student will be able to understand -

- The basic knowledge about immune system and allows the student to create insight as how to improve their immune system and good health. □
- Types of immunity, antigens-antibodies and their properties □ • Complement system, MHC's and immune responses. □
- Types of hypersensitivity reactions and auto immune diseases, Immunotolerance. □
- Understanding of immune mechanisms in disease control, vaccination, process of immune interactions □

Paper II- Ecology and Limnology

MZOIV-B

After the completion of the course, the student will be able to understand -

- Anticipate, analyse and evaluate natural resource issues and act on a lifestyle that conserves nature. □
- About fundamental of Ecosystem. □
- Conservation of natural resources. Global warming, Ozone Depletion etc. □
- Solid waste management. • Knowledge of physico-chemical and biological characteristics of fresh water bodies. • □
- The significance of aquatic flora, fauna in water □ bodies.
- About pollution of rivers, causes and control □ measures.
- Legislation and regulation on discharge of industrial effluents and domestic wastes in rivers and reservoirs. □

-
- The students will be well equipped to become very competent in research or teaching field.□

Paper III -*Biology of Parasitism*

MZOIV-C

After the completion of the course, the student will be able to understand -

- Host-parasite relationship□
- Different types of Viral, bacterial and Fungal Disease.□
- Protozoan Helminthus Disease. Disease transmitted by insects.□
Understanding of pathology of diseases caused by various microorganisms such as bacteria, virus, parasites and fungus.□

Paper IV -Aquaculture and Fisheries

MZOIV-D

After the completion of the course, the student will be able to understand -

- The aquaculture practices. Overview importance of coastal and freshwater aquaculture, □□ Types of Fish Farming.□
- Physicochemical Condition of Water and its effect on Fishes.□
- Construction and Maintenance of fresh water fish farm, Management of Ponds□
- Fresh Water Fish Breeding (Dry & Wet bundh breeding and induced breeding).□
- -Stocking and transport of fish seed and brood fish.□
- Fishing Methods.□
- Different type of Fish farming-integrated ,Sewage, prawn,Marine, Intensive culture.□
- Preparation and Maintenance of Fish Aquarium.□
- FishesPreservation and byproducts□
- Fish Marketing□
- Fish diseases and their □ control
- Disease Caused by □ Pollutants.

- Organizations related to Aquaculture Promotion.□
- It is one of the small-scale industries which can provide the student employment opportunity.□
- Provides knowledge of ornamental fish breeding which is highly professional and attractive avenue for youth.□

Lab Work I: Based on Paper I and II

MZOIV-E

After the completion of the course, the student will be able to understand -

- The basic knowledge about immune system and allows the student to create insight as how to improve their immune system and good health.□
- Types of immunity, antigens-antibodies and their properties.□
- Complement system, MHC's and immune responses.□

- Types of hypersensitivity reactions and auto immune diseases, Immunotolerance. □
- Understanding of immune mechanisms in disease control, vaccination, process of immune interactions □
- Anticipate, analyse and evaluate natural resource issues and act on a lifestyle that conserves nature. □
- About fundamental of Ecosystem. □
- Conservation of natural resources. Global warming, Ozone Depletion etc. □
- Solid waste management. • Knowledge of physico-chemical and biological characteristics of fresh water bodies. • □
- The significance of aquatic flora, fauna in water □ bodies.
- About pollution of rivers, causes and control □ measures.
- Legislation and regulation on discharge of industrial effluents and domestic wastes in rivers and reservoirs. □
- The students will be well equipped to become very competent in research or teaching field. □

Lab Work II: Based on Paper III and IV

MZOIV-F

After the completion of the course, the student will be able to understand -

- Host-parasite relationship □
- Different types of Viral, bacterial and Fungal Disease. □
- Protozoan Helminthes Disease. Disease transmitted by insects. □
- Understanding of pathology of diseases caused by various microorganisms such as bacteria, virus, parasites and fungus. □
- The aquaculture practices. Overview importance of coastal and freshwater aquaculture, □ □ Types of Fish Farming. □
- Physicochemical Condition of Water and its effect on Fishes. □
- Construction and Maintenance of fresh water fish farm, Management of Ponds □

- Fresh Water Fish Breeding (Dry & Wet bundh breeding and induced breeding).
□
- -Stocking and transport of fish seed and brood fish.□
- Fishing Methods.□
Different type of Fish farming-integrated ,Sewage, prawn,Marine, Intensive culture.□
- Preparation and Maintenance of Fish Aquarium.□
- FishesPreservation and byproducts□
- Fish Marketing□
- Fish diseases and their □ control
- Disease Caused by □ Pollutants.
- Organizations related to Aquaculture Promotion.□
- It is one of the small-scale industries which can provide the student employment opportunity.□
- Provides knowledge of ornamental fish breeding which is highly professional and attractive avenue for youth.□

Course Outcomes:

B.Sc. I

Subject: Botany

Semester I: Microbial Diversity and Plant Pathology

BOT101

After the completion of the course, the student will be able to know about -

- Understand the Viruses, Bacteria, Phycology, Mycology and Plant pathology
- Learn microbial techniques which will be beneficial for agriculture and industry.
- Learn life cycles of selected genera of different groups
- Understand etiology of plant diseases

-
- Apply their knowledge in the crop fields to eradicate or avoid the diseases

Semester II: Archegoniateae and Plant Architecture

BOT201

After the completion of the course, the student will be able to know about -

- Understand the General characteristics and affinities of Bryophytes, Pteridophytes and Gymnosperms
- Phylogenetic relationships with the help of Palaeobotanical studies
Learn morphology, and- flower architecture of angiosperms

Lab I: Instrumentation and Microbial Techniques

BOTP101

After the completion of the practical, the student will be able to know about -

- Understand the instruments, techniques and good lab practices for working in a microbiology laboratory.
- Develop skills for identifying microbes and using them for Industrial, Agriculture and Environment purposes.
- Practical skills in the field and laboratory experiments in Microbiology & Pathology.
- learn to identify Algae, Lichens and plant pathogens along with their Symbiotic and Parasitic associations.
- Can initiate his own Plant & Seed Diagnostic Clinic
Can start own enterprise on microbial product

Lab II: Archegoniate Identification

BOTP201

- Understand the habit, morphological and anatomical characteristics of Bryophytes, Pteridophytes and Gymnosperms
- Learn about Fossils. Palaeobotany is the study of fossil plants.
Learn morphology and modification of root, stem and leaf. and- flower architecture of angiosperms

B.Sc. II

Paper I: Plant Taxonomy, Economic Botany Plant Anatomy and Embryology BSCIIBO-A

After the completion of the course, the student will be able to know about -

- Understand historical development of taxonomy.□
- Know about the utility of plant resources.□
Understand the description, identification, nomenclature and classification of plants. □
- Know about the internal structure of Plants-Study of the tissue and cell structure of plant organs.□
- Knowing –growth, development and reproduction in plants.□

Paper II: Ecology and Plant Physiology

BSCIIBO-B

After the completion of the course, the student will be able to know about -

- Know about the importance, scope and various physiological processes in plants.□
- Understand the plant communities, ecological adaptation and conservation of biodiversities of plants.□

Botany Practical:

BSCIIBO-C

After the completion of the practical, the student will be able to know about -

- Various physiological processes in plants□
- To determine the community structure in terms to density, abundance and frequency. □
- Study of morphology and anatomical adaptation in locally available hydrophytes and xerophytes.□

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Paper I: Plant Physiology, Bio Chemistry and Bio-Technology BSCIIIBO-A

After the completion of the course, the student will be able to know about -

- Understand the water relation of the plants, water transport, mineral absorption and their role in plant growth and metabolism. □
- Describe and differentiate between the various steps of photosynthesis, respiration and enzymes controlling them. □
- Describe classification, types and significance of important biomolecules viz. Carbohydrates, Proteins, Fats etc. □
- Understand the mechanism of nitrogen fixation. □
- Explain the basis of medium preparation, tissue culture, RDNA technology and applied aspects. □

Paper I: Ecology and Utilisation of Plants

BSCIIIBO-B

After the completion of the course, the student will be able to know about -

- Understand how various factors like light, temperature, humidity, soil, water affect biological system and their adaptation. □
- How ecosystem acts as dynamic system with its trophic levels and functioning of food web, food chains, energy flow and mineral cycling. □
- Appreciate the economic value of different plant products and their processing. □
□ Understand therapeutic components of medicinal plants. □

Botany Practical:

BSCIIIBO-C

After the completion of the practical, the student will be able to know about -

- Understand how various physiological phenomena like osmosis, diffusion, permeability, plasmolysis etc. □
- Learn techniques like how to analyze the presence of carbohydrates, fats and proteins. □
- Learn technique to determine community structure in terms of frequency , abundance, density etc and role of habitat in the adaptation. □
- Demonstrate proficiency in the experimental techniques and method of analysis appropriate for their assigned lab works. □

Course Outcomes:

B.Sc. I

Subject: Anthropology

Semester I: Introduction to Biological Anthropology

ANT101

After the completion of the course, the student will be able to know about –

- a. Various theories related to human evolution and variation. They will learn about the history of physical anthropology and its applications.
- b. About relationship between non-human and human primates. They will learn about the origin of hominoid group, distribution and characteristic of extinct hominids and the process of hominization.
- c. Some basic knowledge of genetics is also imparted through his paper.
- d. From the practical components they will understand craniometric measurements, study various parts of human body which is useful in studying evolutionary changes in modern humans.

Semester II: Introduction to Social-Cultural Anthropology

ANT201

After the completion of the course, the student will be able to know about –

1. About the scope and relevance of social- cultural anthropology in relationship with other branches of anthropology.
2. About concepts of society, culture and social institutions.
3. About economic social and political organization.
4. Understand and describe basic concepts and methods of social- cultural anthropology, along with its past and future.
5. Comparative study of culture and society of different ethnic groups. After the

completion of the course, the student will be able to know about - Evolution and distribution of human population.

Lab I

ANTP101

The objective of this practical course is to introduce the students with the human skeletal system and its importance.

Lab II

ANTP201

The objective of this practical course is to introduce the students with the human skeletal system and its importance and to learn anthropometric techniques used in living and non-living humans for assessment of ethnic variation. This will be helpful to make students skill-full for further anthropological study and research.

B.Sc. II

Subject: Anthropology

Paper I: Archaeological Anthropology

BSCIIAN-A

After the completion of the course, the student will be able to know about -

Past human culture which enables the students to understand present cultures in a better way.

Paper II: Tribal Cultures of India

BSCIIAN-B

After the completion of the course, the student will be able to know about -

Tribal cultures in respect to family, marriage, worship economic, political, religion organization and present government policies for their development.

Practical Work

BSCIIAN-C

After the completion of the course, the student will be able to know about -

Paleolithic Mesolithic & acrolithic tools and it also ensure the students to know tribal material culture better.

B.Sc.III

Subject: Anthropology

Paper I: Fundamentals of Human Genetics and Human Growth

BSCIIIAN-A

After the completion of the course, the student will be able to know about - Genetics and importance of growth, Ecology and Demography.

Paper II: Theories of Social Cultural Anthropology

BSCIIIAN-B

After the completion of the course, the student will be able to know about -

Cultural anthropology with different theories & contribution of famous Anthropologist in the field of social culture anthropology.

Practical Work

BSCIIIAN-C

After the completion of the course, the student will be able to know about -

Somatometry genetics, Blood group Dermatographics and basic Statistical tools.

Course Outcomes:

Name of Program: M.Sc. in Anthropology

M.Sc. I Sem

Paper I – Fundamentals of Social/Cultural Anthropology

MANI-A

Upon successful completion of this subject the student will be able to know about:

1. The meaning scope and branches of Social-Cultural Anthropology.
2. Relation of social anthropology with other science and social sciences.
3. Some basic concept of culture and society.
4. Social, economic and political organizations and religion in primitive society.

Paper II – Fundamentals of Physical/Biological Anthropology**MANI-B**

Upon successful completion of this subject the student will be able to know about:

1. The meaning, scope, branches of physical anthropology and its relation with other Sciences.
2. Theories of Organic evolution.
3. Comparative study of Man & Aps.
4. Concept of Race.

Paper III – Prehistoric Anthropology & Palaeo Anthropology**MAN-C**

Upon successful completion of this subject the student will be able to know about:

1. The meaning, branches, aims and applications of Archaeology and its relation with other sciences and social sciences.
2. Cultural evolution of man during Paleolithic, Mesolithic stage and dating techniques are part of it.

Paper IV – Research methods in Anthropology**MANI-D**

Upon successful completion of this subject the student will be able to know about:

1. Various tools and techniques used in research.

Lab Course I – Practical in Craniology and Craniometry**MANI-E**

Upon successful completion of this subject the student will be able to know about:

1. Study and measurement of skull is done in this paper.

Lab Course II– Practical in Osteology and Osteometry**MANI-F**

Upon successful completion of this subject the student will be able to know about:

1. Study and measurement of bones is carried out in this paper.

M.Sc. IIInd Sem**Paper I – Indian Archaeology****MANII-A**

Upon successful completion of this subject the student will be able to know about:

1. Cultural Evolution during Paleolithic, Mesolithic, Neolithic and Chalcolithic period.
2. Indus civilization and megalith culture in India.

Paper II– Fundamentals of Human Genetics

MANII-B

Upon successful completion of this subject the student will be able to know about:

1. History, scope, branches and elementary principles of genetics.
2. Study of genes & Inheritance.

Paper III – Medical Anthropology

MANII-C

Upon successful completion of this subject the student will be able to know about:

1. Health, Illness and disease from a Social perspective.
2. Epidemiology, Health policy & programmes and Medical statistics.

Paper IV – Biostatistics & Computer Applications

MANII-D

Upon successful completion of this subject the student will be able to know about:

1. Measure of dispersion, correlation, test of significance, vital statistics.
2. Introduction to computer.

Lab Course I – Practicals in Archaeology

MANII-E

Upon successful completion of this subject the student will be able to know about:

- 1.Prehistoric tools & techniques and Prehistoric sites .

Lab Course II (Practicals in Applied Biological Anthropology)MANII-F

Upon successful completion of this subject the student will be able to know about:

- 1.To estimate health status of the given population.
2. Personal Identification by different Blood Group Systems.
3. Equip students to some pathological techniques.

4. Knowledge of some techniques used in Forensic Anthropology.
5. Knowledge of genetical traits

M.Sc. IIISemester

Paper-I Advanced Human Biology

MANIII-A

Upon successful completion of this subject the student will be able to know about:

- 1.To learn basics of genetics and genetic diseases
- 2.To Learn about inborn metabolic errors
3. To develop an understanding of inbreeding and its consequences, pedigree etc.

Paper-II Human Growth and Nutrition

MANIII-B

Upon successful completion of this subject the student will be able to know about:

- 1.To develop familiarity with the concept of growth and development
- 2.To develop awareness reading various Health Programs
3. Learning about use of anthropometry in evaluation of nutrition status

Paper III: Disaster Management

MANIII-C Upon successful

completion of this subject the student will be able to:

1. To get introductory knowledge to students regarding disaster management, its meaning nature, scope and importance.
2. To learn about various types of natural and man-made disasters including deforestation and global warming
3. to understand issues related to Displacement and Rehabilitation of diasater victims.
4. to understand socio-political issues like ethnic conflict, naxalism, terrorism and its disastrous impact upon societal harmony.

Paper- IV Demographic Anthropology

MANIII-D

Upon successful completion of this subject the student will be able to:

1. give basic information about demography including its definition, scope and importance.
2. Learn about material, methods and techniques in Demography.
3. Learn about population growth theories and population projection
4. Understand the impact of population growth on environment and society

Lab Course I – Practical in Applied Biological Anthropology

MANIII-E

Upon successful completion of this subject the student will be able to know about:

- 1.To estimate Nutritional Status on the Basis of Various Body Measurements
2. To estimate Genetic Inheritance of Different Genetic Traits among Human Population

Lab Course: II (Practicals in Tribal Demography)

MANIII-F

Anthropology is a research-oriented subject with tribals at its core. This practical provides a basic training to students in demographic studies. Upon successful completion of this subject:

- 1.Students learn about tribal distribution in India and Chhattisgarh through Maps.
2. Develop research skills by learning to prepare research schedule, report writing, book review.
3. Analyse demographic data through statistical tools like mean, mode, median standard deviation, correlation, chi square etc.
- 4.Present the data through graph, pie chart, histogram, bar diagram, line diagram etc.
5. Present research work through PPT.

M.Sc IV Semester

Paper I : Indian Anthropology

MANIV-A

Upon successful completion of this subject the student will be able to know about:

1. Introduction to Indian Anthropologists and their contribution

2. Understanding bases of Indian Social System
3. Learning about popular anthropological concepts

Paper II :Museology

MANIV-B

Upon successful completion of this subject the student will be able1. To get an introduction to Museum and museography.

2. To learn documentation, care and storage of museum collection.
3. To learn about archival materials , their types, classification and storage.
4. Learn about tourism industry, cultural and natural heritage and related job opportunities.

Paper III : Dissertation

MANIV-C

Upon successful completion of this subject the student will be able to know about:

1. To develop research aptitude among the students.
2. To familiarize with research tools and techniques.
3. To develop research skills
4. To gain exposure to field work experiences.
5. Promotes in-depth study of a specific topic of socio-cultural and biological interest.

Paper IV: Forensic Anthropology

MANIV-D

Upon successful completion of this subject the student will be able

1. To learn about definition, aims and scope of Forensic Anthropology.
2. Understand crime scene and assessment of time and course of death.
3. To learn about establishing age and sex related identity using skeletal, dental remains and dermatoglyphics.
4. Personal identification through somatometric, somatoscopic observation, handwriting etc.

Course Outcomes:

Name of Programme: B.Com I

Semester I

Paper I: Financial Accounting

COM101

Upon successful completion of this subject the student will be able to know about:

1. Apply the generally accepted accounting principles while recording transactions and preparing financial statement
2. Prepare final accounts including profit and loss account and balance sheet.
3. Evaluate the importance of depreciation in financial statement.
4. Prepare financial statements of partnership firms.
5. Prepare accounts of inland branches
6. Prepare accounts for profit organisations
7. Prepare cash book and other accounts necessary while running a business.

Paper II: Macro Economics

COM102

Upon successful completion of this subject the student will be able to:

1. Explain the basic concepts related to national income, employment, savings, investments monetary theory, savings and investment function.
2. Measure National Income and examine the problems related to measurement of national income in context to India.
3. Examine how an economy functions. Evaluate the role of consumption, saving and investment in an economy.
4. Evaluate the impact of various economic phenomena like inflation and deflation.
5. Explain concepts like business cycle, multiplier, accelerator and demonetization.

Paper III: Business Law

COM103

Upon successful completion of this subject the student will be able to:

1. Examine various aspects of entering into a contract and implications of different types of contracts
2. Interpret the regulation governing the contract of sale of Goods
3. Discuss the laws governing partnership and legal consequences of their transactions and other actions in relation with the partnership and examine contractual obligations and provisions governing limited liability partnership
4. Describe the significant provisions of the competition act to prevent practices having adverse effect on competition and provision of the consumer protection act to protect the interest of the consumers.
5. Explain the law governing regulation and management of foreign exchange under FEMA.

Semester II

Paper I Business Mathematics

COM201

Upon successful completion of this subject the student will be able to gain:

1. Explain how matrix are used as mathematical tools in representing a system of equations
2. Describe relationship between quantity, price and other variables such as income by using simultaneous equation
3. Present data in simple, summarized and comparison form by using average, ratio, proportion and percentage
4. Apply mathematical formulation and solution of problems related to finance including different methods of interest calculation, future and present value of money.
5. Solve business problems involving complex linear and non-linear relationships between decision variables and their determining factor.

Paper II: Business Organisation and Management

COM202

Upon successful completion of this subject the student will be able to know about:

1. Distinguish and explain each form of business.
2. Prepare draft of article of association and memorandum of association for a business
3. Explain principles and functions of management implemented in the organisation
4. Identify and explain the managerial skills used in business
5. Analyse the concept of delegation of authority, coordination and control

Paper III: Communication and Documentation in Business

COM203

Upon successful completion of this subject the student will be able to:

1. Realize the significance of effective communication in business
2. Learn business vocabulary and understand varied ways/methods to present business plans
3. Gain knowledge on drafting of official letters and documents
4. Develop appropriate skills for report writing and different ways of documentation
5. Explain the role of information technology for enabling business communication and documentation.

Course Outcomes:

B.Com I

Subject: Commerce (Computer Application)

Semester I: Fundamentals of Computers and Office Automation

COMCA101

Upon successful completion of this subject the student will be able to learn:

1. Understand the meaning and basic components of a computer system.
2. Discuss the advantages, limitations and applications of computers.
3. Identify the various input and output units and explain their purpose.
4. Essential for a modern office for day-to-day office management.
5. Learn about text formatting and editing using MS Word.
6. Learn how to do effective presentation using MS Power Point.

Semester II: Computer Software and Office Automation and Tally COMCA201

Upon successful completion of this subject the student will be able to know about:

1. Gain knowledge of systems software and application software.
2. Understand the primary functions of an operating system.
3. Use of utility programs.
4. Understand how the calculation will be done with MS Excel.
5. Learn How to apply various mathematical functions and formatting option in MS Excel.

B.ComIIInd Year

Subject: Commerce

Group-I

Paper I: Corporate Accounting**BCOMII-COA**

Upon successful completion of this course the student will be able to -

1. A comprehensive understanding of the advanced issue in accounting for assets liabilities and owners equity.
2. The ability to account for a range of advanced financial accounting issues.
3. The ability to prepare consolidated account for corporate group.
4. An understanding of the principles of accounting for investments in associate.
5. Strong verbal and written communication skills.

Paper II: Company law**BCOMII-CL**

Upon successful completion of this course the student will be able to define basic term-

1. Demonstrate comprehensive knowledge and understanding of social and economic policy considerations arising in this area.
2. Critically analyze complex problems in relation to the regulation of companies, apply the legal principles studies to these problems, evaluate competing arguments or solutions and present well supported conclusions both orally and in writing.
3. Read and study primary and secondary sources of company law with minimal staff guidance critically analyze, interpret, evaluate and synthesise information. **Group-II**

Paper I: Cost Accounting**BCOMII-CA**

Upon successful completion of this course the student will be able to define basic term-

1. Explain the terminology, basic concepts and principles of Cost Accounting
2. Prepare cost of goods manufactured statement
3. Analyze transactions and prepare accounting entries for job Costing and Process costing.
4. Analyzing data & prepare cost of production reports for process costing.

Paper II : Principles of Business Management**BCOMII-PBM**

Upon successful completion of this course the student will be able to define basic term-

1. To facilitate students understanding of their own managerial skills.
2. Use effective communication skill to promote respect, trust and relationships.

3. Practice critical and creative thinking to emplane the decision making process.
4. Conduct research to identify new business trends and customer needs.

Group III

Paper I: Business Statistics

BCOMII-BS

Upon successful completion of this course the student will be able to-

1. Studying statistics learn a general system of concepts for Statistical Analysis.
2. Demonstrate the ability to apply fundamental concepts in exploratory data analysis.
3. Apply and interpret basic summary and modeling techniques for deviate data define the concept of least squares estimation in liner regression.
4. Prepare index number.
5. Knowledge of Forecasting Method industry vs. Company Sales.

Paper II: Fundamentals of Entrepreneurship

BCOMII-FE

Upon successful completion of this course the student will be able to define basic term- 1. Define basic term.

2. Identify the elements of success of entrepreneurial ventures.
3. Explain entrepreneurial project and its essential elements.
4. Consider the legal and financial conditions as well as the importance of the entrepreneurial infrastructure for starting a business venture.
5. Evaluate the effectiveness of different entrepreneurial strategies
6. Interpret their own business plan.

Or

Paper II Tax Procedure & Practice

BCOMII-TPP

Students can get the good practical knowledge of direct tax and income tax law about business and accounting purpose.

B.ComIIInd Year

Subject: Commerce (Computer Application)

Paper I: Internet Application & E-Commerce

BCOMII-IEC

Upon successful completion of this course the student will be able to-

1. Integrate user-centered design guidelines in developing user-friendly websites.
2. Create a static website using HTML and add dynamic functionality to it by using java script.
3. Gain confidence to create dynamic website on real world problems.
4. Demonstrate an understanding of the foundations and importance of E-commerce.
5. Analyze the impact of E-commerce on business models and strategy.
6. Describe the key features of internet, internets and extranets and explain how they relate to each other.
7. Assess electronic payment systems.

Paper II: Rational Database Management System

BCOMII-RMS

Upon successful completion of this course the student will be able to-

1. Gain a good understanding of the architecture and functioning of database management systems as well as associated tools and techniques, principles of data modeling using entity relationship and develop a good database design and normalization techniques to normalize a database.
2. Understand the use of structured query language and its syntax, transactions, database recovery and techniques for query optimization.
3. Acquire a good understanding of database system concepts and to be in a position to use and design database for different applications.

B.ComIIIrd Year

Subject: Commerce

Core Course (Compulsory Group)

Paper I: Income Tax

BCOMIII-IT

Students can get the good basic practical knowledge of Income tax to develop the skill and techniques use in business and accounting.

Paper II: Indirect Taxes

BCOMIII-INT

Upon successful completion of their course a student will be able to-

1. Analyze indirect taxes such as central excise duty, customs duty, state excise duty etc.
2. Learning the procedure of filing returns.
3. Learning the computation of various indirect taxes.

Paper III: Management Accounting

BCOMIII-MA

Students can get good basic knowledge with skill concept of accounting and managerial decision about entrepreneurship.

Paper IV: Auditing

BCOMIII-AU

Upon successful completion of the requirements for this course student will be able to:

1. Discuss the need for an independent or external audit and describe briefly the development of the role of the assurance provider in modern business society.
2. Explain the regulatory environment in which the external auditor operates and apply rules standards and pronouncement to the conduct of a financial report audit and assurance engagements.
3. Perform and apply professional ethics including code of conduct to specific scenario.
4. Describe the various level of persuasiveness of different types of audit evidence.
5. Understand auditor's legal liabilities and to be able to apply case law in making a judgment whether auditors might be liable to certain parties.
6. The course aims to develop student cognitive skills, especially, analytical, appreciative and communication skill.

Optional Group

Paper I: Principles of Marketing

BCOMIII-PM

Upon successful completion of this course a student will be able to:

1. Use an understanding of marketing and the market driven enterprise to differentiate market, enterprise.
2. Market economy as a foundation for future course work and employer selection.
3. Identify some of the basic approaches to formulating a market strategy in order to participate effectively when working with marketing policy coordinators.
4. Identify key stages of the market planning process in order to create marketing plan through development of key sections common to most plan.
5. Use knowledge of element of the marketing mix and the functional disciplines of marketing such as research and marketing communication in order to guide future course selections.
6. Use understanding of both the product marketing life cycle including professional role and responsibilities within the life cycle to guide marketing career and identify key stake holders in the business work place.

Paper II: International Marketing

BCOMIII-IM

Upon successful completion of this course a student will be able to:

1. Be aware of the differences between domestic marketing and international marketing.
2. Understand how culture affects marketing abroad.
3. Understand the concept of global market.
4. Understand how business customs and motivations may vary from country to country.
5. Develop presentation and writing skills.
6. Work as a team.

Or

Paper II – Indirect Taxes and GST

BCOMIII-GST

Upon successful completion of this course a student will be able to:

1. Learn the computation of central excise duty and Goods Service Tax (GST).
2. Learn the procedure of filing return and get credit refund.

B.Com III

Subject: Commerce (Computer Application)

Paper I: Programming in Visual Basic **BCOMIII-PVB** Upon successful completion of this course a student will be able to:

1. Demonstrate fundamental skills in utilizing the tools of visual environment in terms of the set available command menus and toolbars.

Explain and use of delegates and event for producing event-driven application.

Implement SDI and MDI applications while using forms, dialogs and other types of GUI components.

4. Produce and use specialized new GUI components.
5. Explain message passing mechanism between components and threads using messaging.
6. Apply visual programming to software development by designing projects with menus and submenus.

Paper II: System Analysis, Design & MIS

BCOMIII-SAM

Upon successful completion of this course a student will be able to:

1. Gather data to analyze and specify the requirements of a system.
2. Design system components and environments.
3. Describe the system design tools.
4. Describe the role of maintenance task in the system development life cycle.

Course Outcomes:

M.Com I Sem

Subject: Commerce

Paper I: Managerial Economics

MCOMI-A

Upon successful completion of this course a student will be able to:

1. Understand the roles of managers in firms.
2. Understand the internal and external decision to be made by managers.
3. Analyze real world business problems with a systematic theoretical frame work.
4. Analyze the demand & supply conditions and assure the position of a company.

Paper II: Advanced Accounting

MCOMI-B

Outcomes:

Upon successful conclusion of advanced accounting i will have out -lined the following topic areas.

1. An introduction to business combination concepts and definition.
2. An introduction to consolidated Financial Statements and the consolidation process.
3. The liquidation process of companies
4. An introduction to Global Accounting Standards and Diversity.

Paper III: Income Tax Law and Accounting

MCOMI-C

Students can get the advance practical knowledge of Income Tax Law and provision to develop the skill and techniques use in different area of business income and accounting.

Paper IV: Statistical Analysis

MCOMI-D

Upon successful completion of this course a student will be able to:

1. Learn a general system of concept for statistical analysis.
2. Gain Knowledge of data collection techniques.
3. Study both theory and practice in depth in certain specific areas.
4. Gain Knowledge of the basic concept of probability and random variable.
5. Gain Knowledge of probability distributions.

Paper V: Corporate Legal Framework

MCOMI-E

Upon successful completion of this course a student will be able to:

1. Appriciate the importance of law and legal institutions in business.
2. Have a basic understanding of the law relating to contract, consumer protection, competition, companies and dispute resolution.

2.

3.

M.Com II Sem

Subject: Commerce

Paper I: Business Economics

MCOMII-A

Upon successful completion of this subject the student will be able to:

1. Analyze causes and consequences of unemployment, inflation and economic growth.

Analyze operations of markets under varying competitive conditions.

Analyze the demand & supply conditions and assess the position of a company.

4. Apply effective written and oral communication skills in business.

Paper II: Specialized Accounting

MCOMII-B

Upon successful completion of this course a student will be able to learn:

1. Business combination concepts and definition.

2. Segment and interim reporting.

3. Importance of ethical behavior in business.

Paper III: Tax Planning & Management

MCOMII-C

Students can get the advanced practical knowledge of income tax law and provision. to develop the capacity for computation income tax liabilities and pay planning at personal & professional level.

Paper IV: Advanced Statistics

MCOMII-D

Upon successful completion of the course a student will be able to-

1. Study both theory and practice in depth in certain specific areas.
2. Knowledge of statistical decision theory.
3. Knowledge of statistical techniques covered will include Z tests, T tests, F tests.
4. Knowledge of Statistical quality control and Sampling method.
5. Students learn interpolation and extrapolation method.

Paper V: Business Law

MCOMII-E

Upon successful completion of business law course a student will be able to-

1. Demonstrate an understanding of the legal environment of business.

2.

Apply basic legal knowledge to business transactions.

3. Communicate effectively using standard business and legal terminology.

M.Com III Sem

Subject: Commerce

Paper I: Management Concept

MCOMIII-A

Upon successful completion of this course the student will be able to-

1. Learn their own managerial skills.
2. Learn from the management experience of other.
3. Improve communication skills.
4. Develop and learn about goals specific to the students of this class.
5. Use management thought to develop a better understanding of motivation.

Paper II: Organizational Behaviour

MCOMIII-B

Upon successful completion of this course a student will be able:

1. To discuss the development of the field of organizational behavior and explain the micro and macro approaches.
2. To analyze and compare different model used to explain individual behavior related to motivation and rewards.
3. To identify the process used in developing communication and resolving conflicts.
4. To explain group dynamics and demonstrate skills required for working in groups (team building).
5. To identify the various leadership style and the role of leader in a decision making process.
6. To explain organizational culture and describe its dimensions and to examine various organizational designs.
7. To discuss the implementation of organizational change.

Upon successful completion of this course a student will be able to:

1.Apply cost accounting theory to problem solving.

Analyze data and prepare cost of production reports for process costing.

Prepare cost of goods manufactured statement.

- 2.
- 3.
4. Explain the terminology basic concept and Principles of Cost Accounting.
5. Analyze transactions and prepare accounting entries for job costing and process costing.

Paper IV: Management Accounting

MCOMIII-D

Upon successful completion of this course a student will be able to:

Various uses of financial accounting to get the quality oriented decisions for betterment of business.

Paper V: Accounting for Managerial Decisions

MCOMIII-E

Upon successful completion of this course a student will be able to:

For the development of business in new area or the change of business subject will support in taking financial decisions logically.

M.Com IV Semester

Subject: Commerce

Paper I: Principles of Marketing

MCOMIV-A

Upon successful completion of this course a student will be able to:

1. Assess marketing's role in discovering and satisfying consumers needs, wants and behaviors.
2. Determine market size through a target market analysis.
3. Utilize environment scanning to identify opportunities and threats in the marketing environment.
4. Examine electronic commerce and interactive marketing and how they create customer value.

Paper II: Advertising & Sales Management

MCOMIV-B

Upon successful completion of this course a student will be able to:

1. Develop effective marketing communication strategies and program.

2. Understand the implications of current trends in advertising and promotion.

2.

3.

3. Assess the strengths, weakness, opportunities and threats (SWOT) of different kinds of promotional campaigns.

4. Apply marketing communication functions such as advertising, direct marketing, the Internet interactive media and Sales Promotion.

Paper III: Marketing Research

MCOMIV-C

Upon successful completion of this course a student will be able to:

Get the advanced practical knowledge & research work of marketing development, consumer behaviors and marketing skill techniques used in different areas of business.

Paper IV: International marketing

MCOMIV-D

Upon successful completion of this subject the student will be able to:

1. Differentiate between domestic marketing and international marketing.

2. Understand the concept of global marketing.

3. Develop presentation and writing skills.

Paper V: Project Viva

MCOMIV-E

Upon successful completion of this subject the student will be able to:

Know about the business and Management Practice.

B A/B Sc/B Com

Subject: Environmental Studies

Semester I: Natural Resources, Ecosystem and Biodiversity EVS101

This course will enable the student to be:

1. Aware about environment.

Semester II: Environmental Pollution, Issues, Management and Fundamental Rights

EVS201

This course will enable the student to:

1. Aware about environment.

Subject: NCC

Semester I: NCC: Organisation and Community Development NCC101

The students will develop a sense of responsibility and thereby display sense of patriotism, secular values, disciplines, improve bearing and develop the quality of immediate and implicit obedience of good things which will help to mould them a good citizen of the country.

Semester II: Personality Development and Social Service NCC201

The students will be able to enhance their physical , mental and emotional personality and become more confident towards there public life and learn good etiquettes.

Practical I: NCCP101

1. **Foot drill: General and words of command, attention, stand at ease, turning: Left turn, Right turn, About turn, Sizing, Forming up in threes, Numbering, Dressing of Troupe, Khuli line, Nikat line, Saluting Pattern in army, Navy and Air Force, Falling out and Dismissing.**
2. **Group Discussion on current topics and issues, Public peaking/ Extempore, First Aid: Bandages and CPR.**

Practical II: NCCP201

1. **Foot drill: Khade khade salute karna, pared pr visarjan, agli line, madhy line and pichli line se line todna, tejchaltham and dhirechaltham, dahine Bayen, aage our pihe kadam lena, tejchal se mudna, tejchal se salute karna, tej kadam tal our tham , tej kadam tal se kadam badalna, teeno teen se ek file our ek file se teeno teen banana., dahinesaj our dhanhine se saj.**

2. **Group Discussion on current topics and issues, Publicspeaking/ Extempore, NCC and Defence based Quiz and IQ Exercises.**

Course Outcomes:

LL.B Part I (I Semester)

Subject: Law

Paper I: Jurisprudence & Legal Theory

LL.B.-101

On Successful completion of this course Students will be able to –

1. Demonstrate an advanced understanding.
2. Demonstrate "Law in context of Political, Social, Historical, Natural Philosophical, economical and analytical.
3. Demonstrate various legal concepts such as property, Rights and duties, person, Possession, ownership, title, obligation and liability which are the roots of law.
4. Understand ancient and modern source of Law.
5. Demonstrate briefly "Knowledge of Law"
6. Critically analyze complex problems relating to law and legal theory .
7. Engage in identification articulation and Critical evaluation of legal theory and legal concepts.
8. Have an elementary understanding around the nature of Law.

Paper-II: Law of contract & Specific relief Act 1963

LL.B.-102

On Successful completion of this course Students will be able to –

1. Able to define, distinguish and apply the basic concepts and terminology of law of contract.
2. Able to Know how a contract formed performed, breached and remedied.
3. Able to define various processes involved in valid contract formation
4. Able to identify the relevant legal issues in the area of supplementary contract Laws such as sale of goods, partnership. Negotiable instrument, specific performance issues etc.

5. Able to select a range of approaches to written communication and apply the critical thinking required to bring about creative solution in the area of contract law.

Paper-III: Specific contract, Indian Partnership Act 1932 & Sale of Goods Act 1930

LL.B.-103

On Successful completion of this course Students will be able to –

1. Able to define, distinguish and apply the basic concepts and terminology of law of contract.
2. Able to Know how a contract formed performed, breached and remedied.
3. Able to define various processes involved in valid contract formation
4. Able to identify the relevant legal issues in the area of supplementary contract Laws such as sale of goods, partnership. Negotiable instrument, specific performance issues etc.
5. Able to select a range of approaches to written communication and apply the critical thinking required to bring about creative solution in the area of contract law.

Paper IV: Law of Torts including Motor Vehicle Act & Consumer Protection Laws

LL.B.-104

On Successful completion of this course Students will be able to –

1. To Study the Principles of Tortious liability.
2. To Study the capacity of parties to sue and be sued.
3. To evaluate the specific tort against the individual and property.
4. To study the remedies provided under the Consumer Protection Act 1986 and Motor Vehicle Act.

Paper-V: Legal and Constitutional History of India

LL.B.-105

On Successful completion of this course Students will be able to –

1. To Understand the historical development of Law in ancient period medieval and British Period.
2. To understand the development of legal institutions, Law commission, Juridical Institutions and constitution of India.

3. To know the past of the present legal and judicial system.

LL.B Part I (II Semester)

Paper I: Law of Crime I (Indian Penal Code-1807)

LL.B.-201

On Successful completion of this course Students will be able to –

1. Analyze the concept of crime and punishment with reference to structure of society.
2. Suggest the amendments regarding justice according to the changing needs of the society.
3. Indentify Criteria used to evaluate the Criminal Law of India.
4. Indentify social theory about Crime, Justice and Social deviance.
5. Address various obstacles experienced by individuals before during and after internment.
6. Understand and describe areas of criminal justice, law and society through a critical analysis of the subject.
7. Analyze lacunas within the criminal justice system and suggest the amendments to provide the justice according to the changing needs of the society.
8. Summarize the process of judicial review and identify criteria used by courts to evaluate the constitutionality of criminal law of India.
9. Indentify and synthesize social theory about crime, justice and social deviance that explain and address various obstacles and barriers experienced by individual before, during and after internment.
10. Problem – solve complex issues in the criminal justice system and society related to policy, law enforcement, vulnerability and marginalization.

Paper II: Law of Crimes II Criminal Procedure code, Juvenile Justice Act and Probation of offenders Act LL.B.-202

At the end of the course a student will be able to understand.

1. To illustrate how society views about procedure of courts such as FIR, Bail etc
2. Demonstrate an in depth understanding of the aspects of criminal justice.
3. Indentify the principles of Criminal law with present scenario.
4. Students will understand importance of criminal procedure followed by criminal courts.
5. It is explain procedure from arrest till trial and punishment.

6. It is important legislation which gives practical knowledge to students.
7. It also covers the provision of appeals revision etc.
8. It explains hierarchy of criminal courts.

Paper III: Law of Evidence

LL.B.-203

On Successful completion of this course Students will be able to –

1. Analyse and define the concept and general nature of evidence and illustrate the different types of evidence and court procedure relating to evidence.
2. Analyse the rule relating to relevance of evidence and admissibility of evidence before the court.
3. Evaluate the rules relating to dying declaration and admissibility of dying declaration

Paper-IV: Family Law – I (Hindu Law)

LL.B.-204

On Successful completion of this course Students will be able to –

- Students learn about basic concept about religious and legal custom like marriage as a religious sacrament, divorce, parental custody, domestic abuse, succession.
- Family law examines historical and social circumstances that have influenced the modern regulations of families.
- This study gives examples of difference

Paper-V: Family Law – II (Mohammedan Law)

LL.B.-205

On Successful completion of this course Students will be able to –

- Family law examines and compares other personal law.
- Students learn about basic concepts of Muslim culture like marriage as a contract, Meher, Talaq, Hiba, Succession, Marzul maul, wakf based on religious text Quran.

LL.B Part II (I Semester)

Paper I: Constitutional Law –I

LL.B.-301

On Successful completion of this course Students will be able to –

1. Students graduating with constitutional law understand the world, their country & their society

2. Relation between Government and citizen.
3. Learn their rights and duties towards nation as well as theme- selves.
4. Have awareness of social rights, values and responsibility to the self and to others.
5. Understand different disciplines.
6. Students will be able to indentify Constitutional concept and theories related to fundamental rights, duties, directive principles of state police and constitutional remedies.
7. Students will be able to integrate three main pillars of the Nation Judiciary, executive and legislature.
8. Students will be able to evaluate social welfare and interrelationship between fundamental rights and directive Principles through interpretation .

Paper II: Constitutional Law -II

LL.B.-302

On Successful completion of this course Students will be able to –

1. Students graduating with constitutional law understand the world, their country & their society .
2. Relation between Government and citizen.
3. Learn their rights and duties towards nation as well as theme- selves.
4. Have awareness of social rights, values and responsibility to the self and to others.
5. Understand different disciplines.
6. Students will be able to indentify Constitutional concept and theories related to fundamental rights, duties, directive principles of state police and constitutional remedies.
7. Students will be able to integrate three main pillars of the Nation Judiciary, executive and legislature.
8. Students will be able to evaluate social welfare and interrelationship between fundamental rights and directive Principles through interpretation .

Paper III: Administrative Law and Rights to Information Act 2005

LL.B.-303

On Successful completion of this course Students will be able to –

1. Administrative law is mainly a judge made law and has secured its present features through a myriad of judicial decisions. Students got a deep knowledge of the operation and changing phenomenon of these standards from a comparative angle.

2. The ever increasing number of delegated legislation in the form of rules, regulation, circulars and general orders has the characteristic of law, that though framed by administration, impose burden on the rights of citizens.
3. Analyze the scope of review of delegated legislation and the limitations of the judicial review of administration action, the Principle of Natural Justice also have studied in details in this course.

Paper IV: Law of Equity and Trust Act 1882

LL.B.-304

On Successful completion of this course Students will be able to –

1. To understand the ancient law of equity and its use in Indian context.
2. To gain the knowledge about the law of trust in India and its implementation

Paper V: Professional Ethics and Professional Accounting System (Practical) LL.B.-305 On

Successful completion of this course Students will be able to –

1. Demonstrate Personal and organizational entrepreneurship.
2. Engage in lifelong learning in Profession.
3. To Understand Bar-Bench relation and Accountancy for lawyers.
4. To give students as insight into moral decision making in the legal profession.
5. To know Lawyers aim to win at costs.
6. To balance duties towards their client, courts, judges, society and to themselves.

LL.B Part II (II Semester)

Paper I: CG Land Revenue Code and other local laws

LL.B.-401

Students graduating with C.G. Land revenue Code and other local laws.

1. To understand the land Revenue system in urban and non urban area.
2. To understand Bhumiswami, Diversion of Land and Government lessee.
3. To understand the various concept of Revenue Court and their Procedure.
4. Understand and describe legislative power to make laws relating to land and land ceiling is in the state list.
5. Different state have enacted their own laws on this subject and the application of these laws is varied from state to state.
6. The Constitutional perspectives relating to these subject have to be taught as an essential part of this course.

7. Problem solving complex issues in the land related matters and society related to policies, law enforcement, government bindings etc.

Paper II: Environmental Laws including Wild Life Protection and Animal Welfare

LL.B.-402

Students who has taken admission for this course will be able to :

1. Analyze advanced and integrated understanding of the complex body of knowledge in the field of environmental law
2. Develop the capacity to identify new law and apply existing law in the rapidly evolving legal context of environmental law
3. Understand in depth knowledge of the specialised area of environmental law and associated disciplinary areas.
4. Determine and analyze the different causes of population and legal remedies to control it on national level.
5. Analyzed and evaluate laws relating to environmental aspect on a national level and its comparison with other countries.

Paper III :Labour& Industrial Laws I

LL.B.-403

Students graduating with Labour Laws will be able to :-

1. Resolve the labour welfare problem and students will learn the laws relating to industrial Relations, Social Security, private sector wages problem etc .
2. Working conditions and also learns the enquiry procedural and industrial discipline.
3. Development and the judicial setup of Labour Laws.
4. The salient features of industrial dispute and trade union power and function also to integrate the knowledge of labour laws in General HRD Practice.
5. The Laws relating to Industrial Relations, Working conditions and also learns the enquiry procedure and industrial discipline.

Paper IV: Labour & Industrial Law II

LL.B.-404

Students graduating with Labour Laws will be able to :-

1. Resolve the labour welfare problem and students will learn the laws relating to industrial Relations, Social Security, private sector wages problem etc .

2. Working conditions and also learns the enquiry procedural and industrial discipline.
3. Development and the judicial setup of Labour Laws.
4. The salient features of industrial dispute and trade union power and function also to integrate the knowledge of labour laws in General HRD Practice.
5. The Laws relating to Industrial Relations, Working conditions and also learns the enquiry procedure and industrial discipline.

Paper V: Alternative Dispute Resolution (Practicals)

LL.B.-405

Students graduating with 'Arbitration, Conciliation and Alternative Disputes Resolution Systems will be able to :

1. Familiarize with the modalities and techniques of resolution of conflict which is a necessary component in the endeavors of developing expertise in juridical exercise.
2. To understand and analyze the traditional justice delivery system through adjudication by along with an alternative mode of dispute resolution in the common law countries.
3. To approach the processes of arbitration, conciliation and mediation in areas where the traditional judicial system has its way in the past and in the new areas of conflicts that demand resolution by alternative methods.
4. Students to adopt a comparative approach, drawing on the experiences of many societies and jurisdictions – in a large number of which, entrenched approaches to dispute handing are now under radical re-examination
5. Balancing theoretical and practical concerns, the principal areas of discourse and practice that the students will come to understand are the processes of negotiation and mediation .
6. The students will understand these processes in their own rights and also in the context of the emergence of new types of dispute resolution professional, who offer mediation and other services as alternatives of the lawyer often preferred practice of late settlement through litigation.

LL.B Part III(I Semester)

Paper I: Company Law

LL.B.-501

By the end of this course it is expected that the student will be able to :

1. Explain and apply to various fact scenarios the concept of separate legal entity.
2. To explain the basic documents such as MOA and AOA required for company.

3. To develop the ability to identify and effectively use the corporate law resources and to develop the ability to learn company law both independently and cooperatively in a professional environment.
4. To evaluate and analyze socially reasonable corporate behavior.

Paper II: Public International Law

LL.B.-502

On successful completion of the course students will be able to :

1. Demonstrate knowledge and understanding of the international rights frame work, its origins and justifying theories
2. Demonstrate capacity to assess how specific human rights may be asserted, enforced or violated
3. Critically evaluate the relationship between international and domestic law.

Paper III: Interpretation of statutes

LL.B.-503

Students graduating with 'Interpretation of Statute & Principles of Legislation' will be able to :

1. Know what are the techniques adopted by courts in construing statutes? And the importance of the Law making process in the present context.
2. What are the matters to be reckoned with by legislature while enacting laws ?
3. Understand and analyze the judicial interpretation, construction of words, phrases and expressions

Paper IV: Human Rights Law

LL.B.-504

On Successful completion of the course students will be able to :

1. Demonstrate knowledge and understanding of the human rights framework, its origins and justifying theories
2. Demonstrate capacity to assess how specific human rights may be asserted, enforced or violated.
3. Critically evaluate the relationship between international and domestic law on human rights.

Paper V: Moot Court exercise and Internship (Practicals)

LL.B.-505

On Successful completion of the course students will be able to :

1. Understand how to prepare a suit and how to file
2. Know the practical approach of the law course.

Get the practical training to make the career bright

LL.B Part III (II Semester)

Paper I: Transfer of Property Act and Easement Act

LL.B.-601

On Successful completion of the course students will be able to:

1. Analyse and define the concept and nature of transfer of immovable property, and illustrate the different types of transfer and rules relating to it.
2. Analyse the rule relating to transfer of property within two living persons and the consequences of it
3. Evaluate the rules relating to general transfer of immovable property.
4. Determine and analyse the rules of sale of immovable property and rights and liabilities of seller and buyer.
5. Analyse and evaluate the rules governing Mortgages, Leases, Exchanges, Gift and Actionable Claims rights and liabilities to transferor and transferee.
6. Analyse and evaluate the rules relating concept of easement and kinds of easement and rights and liabilities of transferor and transferee.

Paper II: Civil Procedure Code and Limitation Act

LL.B.-602

On Successful completion of the course students will be able to:

1. Know the details procedure for redressal of civil rights.
2. Understand, where the suit is to be filed? The essential forms and procedure for institution of suit the documents in supports and against, evidence taking and trail, dimensions of an interim. Order, the peculiar nature of the suit, the complexities of executing a decree and provision for appeal and revision are all matters which a lawyer for any side is to be familiar with.
3. To have good grounding in the subject before one enters the profession.

Paper III: Law of Taxation

LL.B.-603

On Successful completion of the course students will be able to:

1. This subject provides an introduction to, and overview of, fundamental concepts of income tax law.
2. Employ a broad understanding of tax law.

3. Conduct tax law research by using research skills to interrogate primary and secondary legal material and analyse and synthesis complex legal information.
4. Exhibit sophisticated knowledge related to tax accounting rules and regulation
5. Indentify define and resolve tax issue through their understanding, knowledge and application
6. Explain different types of income and their taxability and expense and their Deductibility.

Paper IV: Intellectual Property Law and IT Act 2000

LL.B.-604

On Successful completion of the course students will be able to:

1. Skill to understand the concept of intellectual property rights.
2. Develops procedural knowledge to Legal System and solving the problem relating to intellectual property rights.
3. Skill to pursue the professional programs in Company Secretaryship , Law, Business (MBA), International Affair, Public Administration and other fields.

Paper V: Drafting Pleading and Convincing

LL.B.-605

On Successful completion of the course students will be able to:

1. Analyz and define the concept to Pleading and various rules of pleading and able to handle the client during the course of interaction.
2. Articulate the argumentation process and apply the legal drafting abilities during the appearances before Court and Tribunals.
3. Recognize the way to move to the criminal justice system with aid of various complaints.
4. Identify and discuss the various forms of conveyancing deed such as sale deed, gift, mortgage etc.
5. Apply legal drafting skills and understand practical aspect of registration of such documents.

Course Outcomes:

LL.M Part I (I Semester)

Subject: LAW

Syllabus of LL.M as prescribed by Universities, two year course and divided into four semesters.

Paper I: Legal and Constitutional History of India

101

Students will be able

1. To Understand the historical development of Law in ancient period medieval and British Period.
2. To understand the development of legal institutions, Law commission, Juridical Institutions and constitution of India.
3. To know the past of the present legal and judicial system.

Paper II: Constitutional Law and New Challenges -I

102

1. Able to define, distinguish and apply the basic concepts and terminology of law of contract.
2. Able to Know how a contract formed performed, breached and remedied.
3. Able to define various processes involved in valid contract formation
4. Able to identify the relevant legal issues in the area of supplementary contract Laws such as sale of goods, partnership. Negotiable instrument, specific performance issues etc.
5. Able to select a range of approaches to written communication and apply the critical thinking required to bring about creative solution in the area of contract law.

Paper III: Constitutional Law and New Challenges -II

103

1. Able to define, distinguish and apply the basic concepts and terminology of law of contract.
2. Able to Know how a contract formed performed, breached and remedied.
3. Able to define various processes involved in valid contract formation
4. Able to identify the relevant legal issues in the area of supplementary contract Laws such as sale of goods, partnership. Negotiable instrument, specific performance issues etc.
5. Able to select a range of approaches to written communication and apply the critical thinking required to bring about creative solution in the area of contract law.

Paper IV: Research Methodology

104

1. There are two parts in course work syllabus: (i) Research Methodology & (ii) Research ethics.
2. The researchers can achieve appropriate knowledge or Research work & research writing by these research methodology & ethics.
3. Both the parts are essential to researchers. It has great significance for a researcher with out which he cannot work successfully.
4. It is the first & foremost vision to the researchers without which they cannot write the thesis or any type of research –oriented works.
5. Recognized primary and secondary source of legal research material.
6. Use and apply secondary source, case law and legislation using both paper based and online resources to a research problem.
7. Develop correct research strategies to critically evaluate the relevance, quality, authority and currency of the research materials.
8. Demonstrate good legal writing skills, including an understanding of the use and preparation of legal research material in legal writing and the correct methods of legal referencing.

LL.M Part I (II Semester)

Paper I: Jurisprudence & Legal Theory

105

On Successful completion of this course Students will be able to –

1. Demonstrate an advanced understanding.
2. Demonstrate "Law in context of Political, Social, Historical, Natural Philosophical, economical and analytical.
3. Demonstrate various legal concepts such as property, Rights and duties, person, Possession, ownership, title, obligation and liability which are the roots of law.
4. Understand ancient and modern source of Law.
5. Demonstrate briefly "Knowledge of Law"
6. Critically analyze complex problems relating to law and legal theory .
7. Engage in identification articulation and Critical evaluation of legal theory and legal concepts.
8. Have an elementary understanding around the nature of Law.

Paper II: Interpretation of statutes and Theory of legislation

106

Students graduating with 'Interpretation of Statute & Principles of Legislation' will be able to:

1. Know what are the techniques adopted by courts in construing statutes? And the importance of the Law making process in the present context.
2. What are the matters to be reckoned with by legislature while enacting laws ?
3. Understand and analyze the judicial interpretation, construction of words, phrases and expressions

Paper III: Indian Administrative Law

107

On Successful completion of this course Students will be able to –

1. Administrative law is mainly a judge made law and has secured its present features through a myriad of judicial decisions. Students got a deep knowledge of the operation and changing phenomenon of these standards from a comparative angle.
2. The ever increasing number of delegated legislation in the form of rules, regulation, circulars and general orders has the characteristic of law, that though framed by administration, impose burden on the rights of citizens.
3. Analyze the scope of review of delegated legislation and the limitations of the judicial review of administration action, the Principle of Natural Justice also have studied in details in this course.

Paper IV: Human Rights and Environmental Development Policy

108

On Successful completion of the course students will be able to :

1. Demonstrate knowledge and understanding of the human rights framework, its origins and justifying theories
2. Demonstrate capacity to assess how specific human rights may be asserted, enforced or violated.
3. Critically evaluate the relationship between international and domestic law on human rights.
5. Analyze advanced and integrated understanding of the complex body of knowledge in the field of environmental law
6. Develop the capacity to identify new law and apply existing law in the rapidly evolving legal context of environmental law
7. Understand in depth knowledge of the specialized area of environmental law and associated disciplinary areas.
8. Determine and analyze the different causes of population and legal remedies to control it on national level.
9. Analyzed and evaluate laws relating to environmental aspect on a national level and its comparison with other countries. **LL.M Part II (I Semester)**

(Constitutional Group)

Paper I: Constitutional Law of UK and Commonwealth Relation

109

1. Students post graduating with constitutional law of UK and Commonwealth understand the world, their country & their society.
2. Relation between Government and citizen.
3. Learn their rights and duties towards nation as well as theme- selves.
4. Have awareness of social rights, values and responsibility to the self and to others.
5. Understand different disciplines in UK and Commonwealth Relation.
6. Students will be able to indentify Constitutional concept and theories related to fundamental rights, duties, directive principles of state police and constitutional remedies.
7. Students will be able to integrate three main pillars of the Nation Judiciary, executive and legislature.
8. Students will be able to evaluate social welfare and interrelationship between fundamental rights and directive Principles through interpretation.

Paper II: Constitutional Law of USA and Comparative Studies of Other Federal System

110

1. Students graduating with constitutional law of USA and Comparative Studies of Other Federal System understand the world, their country & their society .
2. Relation between Government and citizen.
3. Learn their rights and duties towards nation as well as theme- selves.
4. Have awareness of social rights, values and responsibility to the self and to others.
5. Understand different disciplines of USA and Comparative Studies of Other Federal System.
6. Students will be able to indentify Constitutional concept and theories related to fundamental rights, duties, directive principles of state police and constitutional remedies.

7. Students will be able to integrate three main pillars of the Nation Judiciary, executive and legislature.
8. Students will be able to evaluate social welfare and interrelationship between fundamental rights and directive Principles through interpretation.

Paper III: Constitutional Law of Canada and Australia

111

1. Students graduating with constitutional law of Canada and Australia understand the world, their country & their society.
2. Relation between Government and citizen.
3. Learn their rights and duties towards nation as well as theme- selves.
4. Have awareness of social rights, values and responsibility to the self and to others.
5. Understand different disciplines of Canada and Australia
6. Students will be able to indentify Constitutional concept and theories related to fundamental rights, duties, directive principles of state police and constitutional remedies.
7. Students will be able to integrate three main pillars of the Nation Judiciary, executive and legislature.
8. Students will be able to evaluate social welfare and interrelationship between fundamental rights and directive Principles through interpretation .

Paper IV: Constitutional Law of Japan and Switzerland

112

1. Students graduating with constitutional law of Japan and Switzerland understand the world, their country & their society .
2. Relation between Government and citizen.
3. Learn their rights and duties towards nation as well as theme- selves.
4. Have awareness of social rights, values and responsibility to the self and to others.
5. Understand different disciplines of Japan and Switzerland.
6. Students will be able to indentify Constitutional concept and theories related to fundamental rights, duties, directive principles of state police and constitutional remedies.
7. Students will be able to integrate three main pillars of the Nation Judiciary, executive and legislature.
8. Students will be able to evaluate social welfare and interrelationship between fundamental rights and directive Principles through interpretation .

(Crime and Tort Group)

Paper I: Criminology

113

On Successful completion of the course students will be able to:

1. Demonstrate knowledge of the general history of crime movements and criminology.

2. Evaluate a number of different definitions of Crime hood.
3. Critically analyze the issue that underline the main needs of crime victims
4. Evaluate recent legislative changes that increase the opportunity for Criminals to crime to be active players in the criminal justice process.
5. Evaluate critically issues that emerge when particular types of criminals are involved with the criminal justice system and other agencies.
6. Critically analyze media and other political debate about Criminal and their needs in broader economics, optical and social contexts.

Paper II: Penology

114

On Successful completion of the course students will be able to:

1. This course provides the student and understanding of the various theories of punishment, Panel reform, Prison reform etc.
2. Penology is a multi disciplinary subject that aims for the study and evaluation of the application of Penal Laws.
3. Penology is almost seen in every aspect in type of punishment for the crime and offences.
4. Penology deals with care, custody, treatment, prevention, Parole, Probation and control of Crime as also the various modes of sentencing and rehabilitation of criminals.
5. Understand the various dimensions of the various aspects of the Indian Law and abroad Law related to Penology.
6. Understand the various aspect of the Indian Legal structure life that of the concept of restorative justice and compensatory schemes for victims.
7. Demonstrate a through and contextual knowledge of panel law and the various leading cases particularly in its application to real law problems.
8. Indentify and engage the key issue problem, trends, Ideas, and debates within the field of penology.

Paper III: General Principles of Criminology Law and IPC

115

1. Analyze the concept of crime and punishment with reference to structure of society.
2. Suggest the amendments regarding justice according to the changing needs of the society.
3. Indentify Criteria used to evaluate the Criminal Law of India.
4. Indentify social theory about Crime, Justice and Social deviance.
5. Address various obstacles experienced by individuals before during and after internment.
6. Understand and describe areas of criminal justice, law and society through a critical analysis of the subject.
7. Analyze lacunas within the criminal justice system and suggest the amendments to provide the justice according to the changing needs of the society.
8. Summarize the process of judicial review and identify criteria used by courts to evaluate the constitutionality of criminal law of India.

9. Identify and synthesize social theory about crime, justice and social deviance that explain and address various obstacles and barriers experienced by individual before, during and after internment.
10. Problem – solve complex issues in the criminal justice system and society related to policy, law enforcement, vulnerability and marginalization.

Paper IV: Law of Evidence

116

On Successful completion of the course students will be able to:

1. Analyze and define the concept and general nature of evidence and illustrate the different types of evidence and court procedure relating to evidence.
2. Analyze the rule relating to relevance of evidence and admissibility of evidence before the court.
3. Evaluate the rules relating to dying declaration and admissibility of dying declaration

LL.M Part II (II Semester)

Constitutional Group

Paper I: Law & Social Transformation in India

117

On Successful completion of the course students will be able to:

1. Demonstrate an advanced understanding.
2. Demonstrate "Law in context of Political, Social, Historical, Natural Philosophical, economical and analytical.
3. Demonstrate various legal concepts such as property, Rights and duties, person, Possession, ownership, title, obligation and liability which are the roots of law.
4. Understand ancient and modern source of Law.
5. Demonstrate briefly "Knowledge of Law"
6. Critically analyze complex problems relating to law and legal theory .
7. Engage in identification articulation and Critical evaluation of legal theory and legal concepts.
8. Have an elementary understanding around the nature of Law.

Paper II: Administrative Law UK, USA, France & India

118

1. Administrative law is mainly a judge made law and has secured its present features through a myriad of judicial decisions. Students got a deep knowledge of the operation and changing phenomenon of these standards from a comparative angle.
2. The ever increasing number of delegated legislation in the form of rules, regulation, circulars and general orders has the characteristic of law, that though framed by administration, impose burden on the rights of citizens.
3. Analyze the scope of review of delegated legislation and the limitations of the judicial review of administration action, the Principle of Natural Justice also have studied in details in this course.

Paper III: Dissertation

119

- After writing the dissertation any students may carry out his dissertation with the proper research method. or guidance.
- In a specific given time (generally one year) a students complete this dissertation work and after evaluate of his work he/she may be awarded a master degree.
- This kind of dissertation may be accounted as intellectual work. Similarly, it may be a great literary value.
- Master & students at all.

Paper IV: ViVa

120

1. Prepare comprehensively to answer questions from all the course of two semesters.
2. Attain Oral Presentation skills by answering question in precise and concise manner.
3. Gain confidence and inter-personal skills.

LL.M Part II (II Semester)

Crime & Tort Group

Paper I: Law of Tort- General Principles

121

On Successful completion of the course students will be able to:

1. To Study the Principles of Tortious liability.
2. To Study the capacity of parties to sue and be sued.
3. To evaluate the specific tort against the individual and property.
4. To study the remedies provided under the Consumer Protection Act 1986 and Motor Vehicle Act.

Paper II: Specific Torts- Special Topic (1) Negligence (2) Vicarious Liability 122 On
Successful completion of the course students will be able to:

1. To Study the Principles of Tortious liability.
2. To Study the capacity of parties to sue and be sued.
3. To evaluate the specific tort against the individual and property.
4. To study the remedies provided under the Consumer Protection Act 1986 and Motor Vehicle Act.

Paper III: Dissertation 123

- After writing the dissertation any students may carry out his dissertation with the proper research method. or guidance.
- In a specific given time (generally one year) a students complete this dissertation work and after evaluate of his work he/she may be awarded a master degree.
- This kind of dissertation may be accounted as intellectual work. Similarly, it may be a great literary value. Master & students at all.

Paper IV: ViVa 123

1. Prepare comprehensively to answer questions from all the course of two semesters.
2. Attain Oral Presentation skills by answering question in precise and concise manner.
3. Gain confidence and inter-personal skills.

Course Outcomes:

PGDCA

Paper I: Fundamentals of Computers

PGDCAI-A

1. Understand the meaning and basic components of a computer system.
2. Discuss the advantages, limitations and applications of computers.
3. Define and distinguish Hardware and Software components of computer system.
4. Identify different computing machines during the evolution of computer system.

5. Gain knowledge about five generations of computer system.
6. Identify and discuss the functional units of a computer system.
7. Identify the various inputs and output units and explain their purposes.
8. Understand the role of CPU and its components.
9. Understand the concept and need of primary and secondary memory.

Paper II: Office Automation and Tally

PGDCAI-B

1. To improve quality of output in terms of presentation and reduction in processing time
2. Student will do by their own create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements, etc
3. Students do possess required skill and can also be employed as Tally data entry operator

Paper III: Programming in “C”

PGDCAI-C

1. Solve the given problem using the syntactical structures of C language
2. Develop, execute and document computerized solution for various problems using the features of C language.
3. To read and write C program that uses pointers, structures, files etc.

Practical based on PGDCAI-B

PGDCAI-D

By learning the course, the students will be able

1. To perform documentation
2. To perform accounting operations
3. To perform presentation skills

Practical Based on PGDCAI-C**PGDCAI-E**

After Completion of the course student should able to know concepts in problem solving, to do Programming in C language to write diversified solutions using C language.

Semester II**Paper I: Programming in VB.NET****PGDCAII-A**

1. Demonstrate fundamental skills in utilizing the tools of a visual environment in terms of the set of available command menus and toolbars
2. Explain and use of delegates and events for producing event-driven application
3. Implement SDI and MDI applications while using forms, dialogs, and other types of GUI components
4. Produce and use specialized new GUI components
5. Explain message passing mechanism between components and threads using messaging
6. Apply .net programming to software development by designing projects with menus
7. and submenus
8. Use .net programming environment to create simple visual applications

Paper II: Database Management System (DBMS)**PGDCAII-B**

1. Gain a good understanding of the architecture and functioning of database managementsystems as well as associated tools and techniques, principles of data modeling using entityrelationship and develop a good database design and normalization techniques to normalizea database.
2. Understand the use of structured query language and its syntax, transactions, databaserecovery and techniques for query optimization.
3. Acquire a good understanding of database systems concepts and to be in a position to use anddesign databases for different applications.

Paper III- Internet and Web Technology

PGDCAII-C

1. Design and implement an e-commerce application with a shopping cart.
2. Integrate user-centered design guidelines in developing user-friendly websites.
3. Analyze different types of portal technologies and deployment methodologies commonly used in the industry.
4. Create a static website using HTML and add dynamic functionality of CSS
5. Gain confidence to create dynamic website on real world problems.

Practical Based on PGDCAII-A

PGDCAII-D

- 1.To learn how to design and develop VB .Net application.
- 2.To familiar with all tools of VB .Net
- 3.Creation function and procedure.
- 4.To learn ADO .NET database programming .

Practical Based on PGDCAII-B and PGDCAII-C

PGDCAII-E

1. Design and implement a database for a given problem according to well known design principles that balance data retrieval performance with data consistency.
2. Design, create, build, and debug Visual Basic applications
3. Write Windows applications using forms, controls, and events.
4. Create local HTML pages and move them to a remote web server.
5. Design and develop basic web pages using HTML and CSS
6. Link pages so that they create a Web site.

PGDCA

Semester I

PGDCA-101 Fundamentals of Computers

Objectives

Upon successful completion of this subject the student will be able to:

1. Understand basic knowledge of computer, their types, application and features.
2. Distinguish between Systems software and Application software.
3. Identify the primary functions of an Operating System.
4. Describe the “boot” process.
5. Identify Desktop and Windows features.
6. Use Utility programs.
7. Compare between Human and Computer Language.
8. Define computer communication process.

Course Outcomes:

1. Understand the meaning and basic components of a computer system.
2. Discuss the advantages, limitations and applications of computers.
3. Define and distinguish Hardware and Software components of computer system.
4. Identify different computing machines during the evolution of computer system.
5. Gain knowledge about five generations of computer system.
6. Identify and discuss the functional units of a computer system.
7. Identify the various inputs and output units and explain their purposes.
8. Understand the role of CPU and its components.
9. Understand the concept and need of primary and secondary memory.

Course Outcomes:

Subject: Diploma in Business Management:

Faculty of Commerce

Paper I: Principles and Practice of Management**DBM-A**

Upon successful completion of this course a Student will be able to:-

1. To understand role of a professional manager.
2. Know about management planning and decision-making techniques.
3. Know about business communication.
4. Know about motivation, leadership and direction.
5. Skill development.
6. The student's knowledge control technique.

Paper II: Managerial Economics & Business Environment**DBM-B**

Upon successful completion of this course a Student will be able to:-

1. Analyse the demand and supply conditions and assess the position of a firm.
2. Analyse causes and consequences on unemployment, inflation and economic growth.
3. Analyse operation of market under varying competitive conditions.

Paper III: Financial Management and Control**DBM-C**

Upon successful completion of this course a Student will be able to:-

1. List the primary sources of capital and incorporate their cost when making investment decisions.
2. Calculate the value of various financial assets.
3. Learn about the importance of the financial decision and optimum capital structure.
4. Understand the role of various financial institutions and financial investments in the money and capital market.

Paper IV: Personnel Management and Financial Accounting**DBM-D**

Upon successful completion of this course a Student will be able to:-

1. Acquire an insight in to the role and responsibilities of the personnel management functions.
2. The different system with in Personnel Management viz recruitment and selection, Performance management Compensation Managements employee Relationship Management and recognize their strategic contribution to business and organization.
3. This course aims to imparting basic knowledge of the subject.

Paper V: Production Management & Marketing Management**DBM-E**

Upon successful completion of this course a Student will be able to:-

1. Apply decision-making techniques in Production Management.
2. Apply Work Force Management techniques in business cases.
3. Identify some of the basic approaches to formulating a market strategy in order to participate effectively.
4. Use knowledge of element of the marketing mix and the functional disciplines of marketing such as Research & Marketing Communication.

Project**DBM-F**

Upon successful completion of this course the students will be able to gain practical experience while studying upon a business unit.

Viva**DBM-G**

Upon successful completion of this course students will be able to present and explain the report prepared by them systematically.