



**NAVYUG KANYA MAHAVIDYALAYA  
RAJENDRA NAGAR, LUCKNOW  
SESSION-2019-20**

**Programme Outcomes & Course Outcomes**

**Department of Political Science**

**Program Outcome-B.A (2019-20)**

- Help students to understand the basic principles of Political Science
- It is helpful in understanding the Political ideas of western and Eastern political thinkers
- Helpful in understanding the constitutional and political structure of different countries
- Program Specific Outcome
- Students are informed about the constitutions of Indian and western political thinkers to the background of political theory
- The study of the constitution of India creates the ideal citizens in society
- Students are able to understand the role of public administration in India
- Help students world scenario
- Helpful in the comparative study of constitution of major countries of the world

**Course Outcome**

**Course-1,Sem-1,PaperName-Political Theory-1**

- Introduce student to the basic concept of Political Science
- Acquaint students to the core themes of the subject
- Student will develop a comprehensive understanding of political concepts such as equity,Justice,law and liberty

**Course-2 Sem-1 Paper Name -National Movement of India**

- Student will understanding the evaluation of Nationalism in India
- Student will understand the Political resurgence which led to the independence of India
- Student will understand the processes in the framing of Indian constitution and its inherent philosophy
- Students will understand various aspects of the Indian independence

**Course -3,Sem- 2,Paper Name-Political Theory-2**

- Understand the basic concept of political Science
- Student will Understand the different forms of government and their functioning
- Student will develop an understanding of various practices related to the state and democracy

#### **Course-4,Sem-2,Paper Name-Constitution of India**

- The course enlightens the Student about the background and making of the Constitution with its salient features
- The Students will become aware about their fundamental rights and duties as Indian citizens
- It will encourage a study of implementation of directive principles of state policy
- The course acquaints Students with the constitutional design of state and the structure and functions of the Union Government

#### **Course -5,sem -3,PaperName-History of western political though-1**

The course will benefit the students by focusing

It will impart in depth knowledge about the diverse streams of western political theory and though

It will familiarize Students on the evolution of the state in the west

#### **Course-6,SEM-3 ,PaperNamecomparative Government -1**

Will develop an understanding of the working of Parliamentary government in Britain

The working of cabinet supremacy in a monarchial

Setup will be understood

Will develop an understanding of presidential system in USA

#### **Course -7,Sem-4 Paper Name -History of western political though-2**

- It provides a foundation to students of political Science in familiarizing them to the thought and theory of western philosophy in modern Era
- It particularly focuses on the evolution of ideas and institution of state in the west

#### **Course-8 ,Sem-4,Paper Name-Comparative Government-2**

- Will develop an understanding of plural executive system in Switzerland
- Direct democracy and its advantages will be understood
- Will develop an understanding of the political system in France

#### **Course 9(Annual pattern))BA,-3,PaperName -Public Administration**

- Enablesstudents to gain an overview of the discipline
- Equips students to analysethe various principles of origination
- Student will specially come to know about Administration control, Public corporation and independent regulatory commissions
- Will develop an understanding of the Administrative services in India

- The relationship between bureaucracy and executive will be understood

**Course-10 (Annual pattern )BA-3 Paper Name- Indian political Thought**

- Will understand the main tenets of Ancient Indian political Thought
- Will understand the political ideas of Ancient Indian scholars such as Manu, Bhishma ,Shukra and kautilya
- Will understand the concept of law, Justice and types of state in Ancient India
- The course is designed to benefit students to understand the nature and significance of modern political Thought

**Course 11,(Annual Pattern)BA-3,Paper Name- International Politics**

- Introduce students to the key concepts and issues in International Politics
- Make students understand the structure and working of International Politics
- Students gain an insight in to the Cold war and post Cold war International relations
- The students acquire knowledge of International and regional organisations

**Learning Outcome**

- Students will be able to understand political principles
- Students will be able to understand the Indian National Movement and the reasons of the partition of India
- Students will be able to understand the system of formulation and implementation of public policy by the government
- Students will be able to understand the appropriate system and political culture On the basis of comparative study of State system of major countries of the world
- Students will be able to understand importance and relevance of the ideas of Western and Indian political thinkers
- Students will be able to understand the national interest, how to avoid war, and Foreign policy
- The course of political science subject is not skill- oriented, but there are possibilities of employment it makes students ideal, conscious and responsible citizens

**DEPARTMENT OF PHILOSOPHY**

### **Program Specific Outcomes- B.A (2019-20)**

The program focuses on the abilities of students to deal with the situations, problems, and people with better understanding. Along with this it is focused to help students develop among themselves a sense of responsibility and communicate with the world in a better and meaningful ways

### **Course Specific Outcomes**

#### **Semester 1 & 2**

##### **(Indian Philosophy and Western Philosophy)**

The course aims at discussing the historical development of philosophy in ancient Greece and Europe and subsequently details about Medieval philosophers with classical discussion of rationalism, Cartesian method and its limits. Critical study about major elements of metaphysics of Descartes, Spinoza and Leibnitz. After one year of study, the student would fully understand the Western stream of Philosophy. Understanding the key characters and historical context of empiricism in Europe. Understanding Locke, Berkley and Hume's concepts of ideas, impressions, qualities and related distinctions and Kant's critical philosophy.

Indian Philosophy aims to provide Clear understanding of the characteristics and features of Indian philosophical schools including both orthodox and heterodox schools including metaphysics and theories of liberation. Understanding the concept of materialism and its critical questioning to all classical systems. A clear understanding of Jain epistemology, metaphysics and doctrine of qualified assertions, Syadvada brings clarity. A brief detail about the metaphysics of Indian atomists Vaishesikas, Nyaya, Advait Vedant and Vishistadvaita. In depth knowledge about doctrines of levels of reality, bondage and liberation in classical Indian philosophy with reference to the two schools of Vedanta . The study of this course will provide a smooth entry in the field of analysis, argumentation, theory-formation and criticism. It may also be useful for various competitive examinations, academics, government and even private sector job (Human Resource, Ethics-Observer and Philosophical Counselor).

#### **Semester 3 & 4**

##### **(Logic and Ethics, including both Indian and Western)**

After studying the subject the student would be able to comprehend the fundamental issues and basic problems discussed in the field of Logic through distinct terminologies, methods, approaches and arguments provided by the prominent thinkers and traditional schools of India. The key features of post Kantian philosophy including pragmatism, positivism, phenomenology, existentialism and analytic philosophy. The ethical and psychological take on hedonism. Ideas about Cognitivism and Non- Cognitivism which includes ideas of famous Philosophers including G.E.moore, C.L.Stevenson and R.M.Hare. Logic primarily focuses on Categorical syllogism, Symbolic logic and Traditional square of opposition.

Indian Ethics includes Idea of Morality, moral principles in Indian philosophy. The ethical principles of Bhagwatgeeta with special reference to Nihisreyas and Loksamgrah along with a better understanding of critical terms i.e. Dharma, Rta, Rna and related classifications. Understanding Buddhist and Jain ethics with Mahatma Gandhi's ideals of morality.

### **Semester 5 & 6**

#### **(Problems of Philosophy, Philosophy of Religion, Social & Political Philosophy)**

Valid distinctions between religion, philosophy of religion, Science and theology, debates about foundations of religious belief with arguments to prove the existence of God in classical and Indian philosophy. In depth problems regarding existence of evil and conflicts in attributes of god and different theories of religious language. After one semester of study, the student would fully understand the notion of religion and its philosophical exposition. The study of this course will provide a smooth entry in the field of analysis, argumentation, theory-formation and criticism.

Understanding nature of social and political philosophy and basic concepts of individual, society, state and political organization. Glimpses of classical Indian accounts of state and sovereignty from Vedas and Kautilya and conceptual debates on nationalism, cosmopolitanism, pluralism and multiculturalism. Notions of empowerment, discriminations and justice.

Classical debates on causality and substance and debates on the existence of self, soul and god in Indian philosophy, theories of liberation in classical Indian philosophy, epistemology and its characters. Understanding debates in Indian philosophy of language about word and meaning.

#### **Learning Specific Outcomes**

With the course provided for students, it has been made sure that students who read the subject are ready to face challenges in life without any sort of confusion. Philosophy as a subject aims at making sure that students develop a sense of responsibility along with sensible idea of rationality and without a fail the above mentioned course has made sure that students learn most pragmatic aspects of life that helps them face challenges in life with maximum sophistication and clarity. Course has evidently offered students an idea to deal with daily and basic challenges of life and it has been depicted in the results of students that the effort has been worth it.

## **B.A ECONOMICS**

### **PROGRAMME OUTCOME:-**

1. This program aims at the study and application of economic theory and economic decision making.
2. It aims at exposure to different sectors to build the analytical capacity of the student.
3. This programme aims at producing successful and competent economics analysts.
4. This programme seeks to prepare the student for employment in industry, various professions and the government sector.
5. The purpose of this programme is to graduate work towards advance degrees as M.A., MBA or P.hD in Economics.

### **LEARNING OUTCOME:-**

1. The learning outcome of this programme is to ensure the development of an understanding of Micro, Macro theory, Indian Economy, Public Finance, Money and Banking, International Trade, Industrial Economics, Environmental Economics, HET, Basic Statistics, Economic growth and development.
2. This programme will provide a general understanding of functioning of the economic system and the institutions with in that system. On successful completion of the course, the students should be well versed in the concepts, tools and principles in the field of Economics and related field.

### **Course Specific Outcomes**

<b>CLASS</b>	<b>COURSE</b>	<b>COURSE OUTCOMESS</b>	<b>LEARNING OUTCOMES</b>
<b>B.A. I(SEM –I)</b>	<b>Paper –I Microeconomics-I</b>	<ul style="list-style-type: none"><li>● - This course aims to introduce the students to the basic concepts of Micro Economics</li><li>● Its study will enable the students to understand consumers behaviour and producers' behaviour</li></ul>	<ul style="list-style-type: none"><li>● The student will be able to understand the basic concepts of Micro &amp; Macro Economics, equilibrium, utility, consumers surplus, Production fiction &amp; Producer's equilibrium, isoquants and PPC</li></ul>
<b>B.A. I(SEM –I)</b>		<ul style="list-style-type: none"><li>● - This course aims to</li></ul>	<ul style="list-style-type: none"><li>● .The student will learn about the</li></ul>

	<b>Paper –II Indian Economy-I</b>	<p>introduce the students to the basic concepts of Indian Economics</p> <ul style="list-style-type: none"> <li>• - The Course aims to give a comprehensive knowledge of the structure of the Indian economy.</li> </ul>	<p>development of Indian Economy since Independence,</p> <ul style="list-style-type: none"> <li>• Know about the changes in the structure and composition of NI, &amp; Population</li> <li>• .to gain information about Poverty &amp; Unemployment alleviation programmes &amp; their outcomes.</li> <li>• Learn about changes in the composition &amp; direction of foreign trade&amp; Investment in the country .</li> </ul>
<b>B.A. I(SEM –II)</b>	<b>Paper –III Microeconomics-II</b>	<ul style="list-style-type: none"> <li>• This course aims to introduce the students to the basic concepts of</li> </ul>	<ul style="list-style-type: none"> <li>• Learn the concepts of cost &amp; revenue,</li> <li>• Know about different market structures.</li> <li>• Know about Price &amp; output determination</li> </ul>
<b>B.A. II(SEM –III)</b>	<b>Paper –IV Indian Economy-II</b>	<ul style="list-style-type: none"> <li>• This course aims to introduce the students to the basic concepts of Indian Economy</li> <li>• The Course will enable students to gain information about development of Indian Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Know in detail about the Agricultural sector &amp; Industrial sector of India .</li> <li>• Learn about the service sector of the country.</li> <li>• Learn about infrastructure development.</li> <li>• Learn about the economy of U.P.</li> </ul>

<b>B.A. II(SEM –III)</b>	<b>Paper-V Macroeconomics</b>	This course aims to introduce the students to the basic concepts of Macro Economics which deals with the behaviour and performance of an economy as a whole behaviour.	Know about the basic concept of Macro Economics. <ul style="list-style-type: none"> <li>• Learn how to measure macroeconomic variables like GNP, GDP, NI etc</li> <li>• know the various theories and approaches to the determination of Income &amp; Employment</li> </ul>
<b>B.A. II(SEM –III)</b>	<b>Paper –VI Public Finance</b>	<ul style="list-style-type: none"> <li>• This course Provides through understanding of rational for public policy along with fiscal federalism.</li> <li>• This course provide comprehensive understanding of theories of Public expenditure and principle of taxation.</li> </ul>	<ul style="list-style-type: none"> <li>• Know about the difference between Public &amp; Private, Goods &amp; finance.</li> <li>• Learn about the field of study of Public finance and its main aim of achieving maximum Social advantage.</li> <li>• To know about the various sources of Public Revenue &amp; behaviour of taxation.</li> <li>• To learn about Public expenditure &amp; debt.</li> <li>• To learn about Public finance Policy of India</li> </ul>
<b>B.A. II(SEM –IV)</b>	<b>Paper –VII Money and banking</b>	<ul style="list-style-type: none"> <li>• This course Introduces students to the conceptual and practical operations of money, banking, Financial market and institutions.</li> <li>• To learn about the</li> </ul>	<ul style="list-style-type: none"> <li>• To know about the demand &amp; supply of money.</li> <li>• To learn about price indices and how they are formulated.</li> <li>• To learn about High Powered money &amp;</li> </ul>



		evolution of money and its types.	money multiplier. <ul style="list-style-type: none"> <li>• To know about Commercial bank, their function credit creation.</li> <li>• To learn about central banking &amp; credit control</li> </ul>
<b>B.A.II(SEM –IV)</b>	<b>Paper –VIII International Economics</b>	<ul style="list-style-type: none"> <li>• This course provides understanding of relationship between international capital market and economics development.</li> <li>• The Course enables students to understand the relationship between theory of foreign trade and Economic development and analyse foreign investment.</li> </ul>	<ul style="list-style-type: none"> <li>• To know about the scope &amp; nature of international economics.</li> <li>• Learn about the historical development of trade theories.</li> <li>• Understand the concept of Balance of Payments</li> <li>• Know the concept of foreign exchange &amp; exchange rate determination.</li> </ul>
<b>B.A III (ANNUAL)</b>	<b>Paper I History Of Economic Thought</b>	<ul style="list-style-type: none"> <li>• Will enable students to know about the development of economic thought and philosophies, including those of great Indian Thinkers.</li> <li>• To learn about differences in the opinion of thinkers</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about thoughts of Physiocrats, Mercantilists and other schools</li> <li>• Know the thoughts of Kautilya, Naoroji, Ranade, Gandhi, etc</li> <li>• Examine the study of economic science of Ricardo, Marx &amp; others</li> <li>• Learn theories of distribution of different economists</li> </ul>

<b>B.A III (ANNUAL)</b>	<b>Paper II Economics Of Growth &amp; Development</b>	<ul style="list-style-type: none"> <li>• Will enable students to know about different growth models</li> <li>• To know about inequalities and their measurements</li> <li>• To know about international organisations influencing development</li> </ul>	<ul style="list-style-type: none"> <li>• Student will know about the concept of development and how it is measured</li> <li>• Will understand various growth models</li> <li>• Will learn about inequities prevailing in the world and its measurement</li> <li>• Will understand the role of international agencies in development</li> </ul>
<b>B.A III (ANNUAL)</b>	<b>Paper III(A) Quantitative Methods</b>	<ul style="list-style-type: none"> <li>• Allow students to learn and use statistical and mathematical tools in the understanding of economic theory</li> </ul>	<ul style="list-style-type: none"> <li>• Learn the basics of algebra, including AP. GP. HP. Indices, trigonometry, etc.</li> <li>• Know calculus</li> <li>• Learn about statistical methods of data collection ,representation and interpretation</li> </ul>
<b>B.A III (ANNUAL)</b>	<b>Paper III (B) Environmental &amp; Resource Economics</b>	<ul style="list-style-type: none"> <li>• Enable students to know about the basic concepts of environmental economics</li> <li>• To comprehend economy-environment relationship</li> <li>• To discuss the current issues of environment &amp; know the policy of India regarding the same</li> </ul>	<ul style="list-style-type: none"> <li>• The students will Know the basic concepts of environment</li> <li>• Learn To examine the Economy environment interrelationship</li> <li>• Understand the current environmental concerns and issues</li> <li>• Know about the environmental policy of India</li> </ul>

## **Department of English**

**M.A(2019-20)**

**Course Outcome-** The two year Post graduate degree in English aims at:

- Extending the core and applied knowledge of English studies across the globe with special emphasis on British, Indian, American, African & Caribbean, Postcolonial studies & SAARC Literature.
- Promoting critical thinking and humanitarian values
- Developing research potential and aptitude of the student
- Facilitating the student to recognize the distinct shift from Eurocentric lit. to Indian Literature in Translation
- Creating awareness & sensitizing the students to society, environment, gender and disability, social valorization and other issues of human dignity.

### **Semester 1-**

Paper 1- English Society, Literature & Thought (Chaucer to 16<sup>th</sup> Century)

#### **Course Specific Outcome:**

- Develop an understanding of the concept, spread and impact of renaissance
- Recognize the impact of discovery of new lands and circulation of new ideas across Europe in the 15<sup>th</sup> and 16<sup>th</sup> century

Paper 2- English Society, Literature & Thought (17<sup>th</sup>&18<sup>th</sup> Centuries)

**Course Specific Outcome:**

- Estimate the social and cultural impact of the political events of the Restoration
- Appraise the different aspects of the Age of Reason through poetry, fiction and prose of 17<sup>th</sup> and 18<sup>th</sup> century

**Paper 3- English Society, Literature & Thought (19<sup>th</sup> Century)****Course Specific Outcome:**

- Interpret the meaning of ‘Victorian Compromise’ and the ‘Victorian Paradox’
- Appraise the emergence of Romanticism in art and literature of 19<sup>th</sup> century

**Paper 4- Introduction to Linguistics and Phonetics****Course Specific Outcome:**

- Extend knowledge of the origin, development and use of languages
- Discover the relationship between Language and Culture

**Learning Outcome of Semester 1**

After the course completion students will be able to:

- Identify the shift of the worldview towards humanism post Renaissance and Reformation
- Identify the reasons of the emergence of the prose and novels and the decline of drama in England
- Develop an understanding of social intellectual and literary background of 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> century
- Identify the differences in language, dialects and other varieties of languages

**Semester 2**

#### Paper 5- English Society, Literature and Thought (20<sup>th</sup> Century)

##### **Course Specific Outcome:**

- Develop a working knowledge of cultural and historical contexts of 20<sup>th</sup> century British Literature
- Identify and describe distinct literary characteristics of the 20<sup>th</sup> century Literature

#### Paper 6- Readings in Literary Criticism

##### **Course Specific Outcome:**

- Develop an overview of the critical theories since classical times
- Apply the critical theories to literary texts

#### Paper 7- English Language Teaching

##### **Course Specific Outcome:**

- Identify the barriers in the teaching English as the second language
- Apply appropriate tools and techniques for teaching English in India

#### Paper 8- Literature and Gender

##### **Course Specific Outcome:**

- Identify the difference between sex and gender
- Recognize the basic ideas of gender and types of feminism through literary texts

## **Learning Outcome of Semester 2**

After the course completion students will be able to:

- Develop an understanding of social, intellectual and literary background and the impact of various theories and techniques of 20<sup>th</sup> century literature
- Develop the art of critical thinking and application of literary theories
- Illustrate the various methods of teaching English and recognize the advantages and the disadvantages of each
- Develop a sensitive approach towards gender discrimination through the studies of feminist literature

## **Semester 3**

Paper 9(A)- American Literature

### **Course Specific Outcome:**

- Appraise the idea of multiculturalism in America through mainstream literature, Black literature and Southern literature
- Compare and contrast the various sociological theories of American culture milieu

Paper 10(B)- Indian Literature in English

### **Course Specific Outcome:**

- Develop an acquaintance with writers and works of Indian writings in English
- Appraise the evolution of Indian culture from traditional to modern through various texts

Paper 11(B)- Stylistics and Discourse Analysis

**Course Specific Outcome:**

- Recognize and associate the stylistic patterns of the texts
- Examine the language of literature i.e. the style and contexts of any text

Paper 12(A)- Colonial and Post-Colonial Literature

**Course Specific Outcome:**

- Recognize the difference in Colonial and Post-colonial sensibilities
- Develop an understanding of Indian Colonial history and struggle against it

**Learning Outcome of Semester 3**

After the course completion students will be able to:

- Understand the social, cultural and literary milieu of America through literary texts
- Recognize the cultural milieu of the post and Pre-Independence era of Indian Literature
- Develop the ability to attempt practical criticism of any text
- Develop an understanding of postcolonial theories

**Semester 4**

Paper 13- Viva-voce

**Course Specific Outcome:**

- Learn to analyze and express the understanding of various prescribed texts

#### Paper 14(A)- African and Caribbean Literature

##### **Course Specific Outcome:**

- Develop an understanding of a range of postcolonial discourses emerging from African and Caribbean regions
- Analyze how race, class, gender, history and identity are presented and problematized in the literary texts of African and Caribbean writers

#### Paper 15(C)- Indian Literature in Translation

##### **Course Specific Outcome:**

- Develop knowledge of the seminal writers and texts of India
- Recognize the importance and benefits of translation
- Develop knowledge of the different languages and literatures of India

#### Paper 16(B)- SAARC Literature in English

##### **Course Specific Outcome:**

- Develop an understanding of the concept of SAARC through literary texts
- Recognize and compare the social milieu and cultural ethos and literary developments of SAARC countries

#### Paper 16(C)- Dissertation

##### **Course Specific Outcome:**



- Learn proper research methodology and use this knowledge to extend scope for further research in literary fields

#### **Learning Outcome of Semester 4**

After the course completion students will be able to:

- Articulate an analytical understanding of various theories and interpretation of texts
- Appraise issues arising from colonialism, independence and diasporic migration in postcolonial texts
- Understand the trajectory of translated Indian writing in English from various regions of India
- Compare and contrast physical, intellectual and literary features of SAARC countries

### **Department of English**

#### **B.A (2019-20)**

#### **Course outcome:**

The completion of the course would benefit the student following ways:

- It offers a comprehensive understanding of social and intellectual climate of European and American and Indian Society
- The study of various literary movements will help them in understanding the texts with greater clarity

- It would introduce the students to texts of great masters from 16<sup>th</sup> to 20<sup>th</sup> century so that they are able to comprehend the evolution of English language and literature over the centuries
- It would also help them analyze that how socio historical factors have influenced individual texts and how individual texts are representative of their age

## **Semester 1**

Paper 1- Poetry (A) [Shakespeare to 18<sup>th</sup> century]

### **Course specific outcome:**

- Understand the concept of Elizabethan poetry and recognize the impact of renaissance in Elizabethan poetry
- Introducing students to the seminal writings of English literature and laying the foundation for contextualizing specific texts against Historical background of 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> century
- Gain insight into the age of Shakespeare and his creative output with regard to both his sonnets and plays

Paper 2- Forms of Fiction & Short Fiction

### **Course specific outcome:**

- Develop a working knowledge of the various concepts related to short-fiction
- Analyzing the art of storytelling and the various structural elements of a short story with reference to prescribed stories of great European and Indian writers

## **Semester 2**

#### Paper 1- Drama (A)

##### **Course specific outcome:**

- Develop the knowledge of the social and intellectual background leading to the rise of drama
- To have an understanding of the plays of different ages and get an acquaintance with literary features of dramatic art

#### Paper 2- Prose (A)

##### **Course specific outcome:**

- Understand the prescribed prose styles through select readings of representative texts
- Understand the genre of essays from Bacon to Lamb through the prescribed texts and cultivate an understanding of the historical and cultural background of the concerned age

#### **Semester 3**

#### Paper 1- Poetry (B) [Romantics & Victorians]

##### **Course specific outcome:**

- Appraise the classic Romantic and Victorian poets through their select works
- Gain insight into the unique traits of the literary movements of the Romanticism through the representative works of Romantic poets
- Understand the historical and intellectual background and its impact on Victorian poetry

#### Paper 2- Fiction

**Course specific outcome:**

- Develop a comprehensive knowledge of the British fiction through the study of representative writers of England
- Learn basic knowledge of forms, elements and types of fiction
- Get an understanding of the significant various social factors in a novel

**Semester 4****Paper 1- Drama (B)****Course specific outcome:**

- Recognize and comprehend the trajectory and development of drama in Victorian era
- Investigate the way the socio-political scenario influenced the literary production of the era

**Paper 2- Prose (B)****Course specific outcome:**

- Develop a comprehensive knowledge of the development of prose across various eras of English literature
- Understand the pattern of development and changes in the ideas and literary techniques used by British and American prose writers

### **B.A 3 (Annual System)**

#### Paper 1- History of English Literature

##### **Course specific outcome:**

- Develop a comprehensive understanding of the history of English Literature
- Offers extensive insight into the history of English Literature, while laying special emphasis on various literary movements, genres and trends

#### Paper 2- Modern Literature

##### **Course specific outcome:**

- Recognize the characteristics features of the modern literature in English and its thematic diversity
- Critically analyze British, American and Indian literary texts in the light of several movements in literature and understand prescribed literary works through an analysis of theme, character and other literary devices

#### Paper 3- Functional skills in language and literature

##### **Course specific outcome:**

- Use the correct pronunciation of words, identify the differences in language, dialects and other varieties of languages
- It aims to help the students to develop functional skills in English language so that they can use it correctly and appropriately

##### **Learning outcome:**

After course completion, students will be able to:

- Comprehend the various poetic styles prevalent in the different eras
- Identify the similarities and difference between various types of short fiction
- Comprehend the history and rise of drama in England
- Develop an understanding of the diverse techniques of prose writing
- Develop a working knowledge of the various concepts relating to short-fiction
- Understand the social paradigm of drama and its related contexts
- Understand the rise of modern prose and its diverse techniques
- Comprehend the defining ethos and characteristics of different periods in English
- Develop an understanding of the Eastern and Western consciousness as reflected through modern poetic texts
- Discover the relationship between language and culture

### **Functional English**

#### **B.A (2019-20)**

#### **Course outcome:**

- Ability to analyze various elements of grammatical units of English and design language component critically and coherently to meet desired needs within the realistic constraints
- Ability to identify common errors in various parts of English and give effective expression in oral and written communication
- Enhance English writing skills and understand the fundamental concepts of language and communication

#### **Semester 1**

##### **Paper 1- Remedial Grammar**

#### **Course specific outcome:**

- Learn the application of basic grammar of English language
- Learn the common errors, accent and phonology of English language

Paper 2- Introduction to linguistics, morphology and syntax

**Course specific outcome:**

- Understand the basics of linguistics
- Develop knowledge of unit and structure of sentences

**Semester 2**

Paper 3- Writing skills

**Course specific outcome:**

- Learning to use of written language in various forms like letter, report, presis etc.
- Learning to use proper expressions and usage of figures of speech, idioms and phrases, etc.

Paper 4- English phonetics and phonology

**Course specific outcome:**

- Get an acquaintance with different sounds and technicalities of spoken language
- Get an understanding of phonetics and phonology

**Semester 3**

#### Paper 5- Language and communication

##### **Course specific outcome:**

- Get a knowledge of various types of communication
- Learning to use language in interviews and interpersonal communications

#### Paper 6- Conversational skills

##### **Course specific outcome:**

- Learn to communicate in English language in various situations
- Learning the proper etiquettes regarding formal greetings, interviews and in other similar spheres

#### **Semester 4**

#### Paper 7- Sociolinguistics

##### **Course specific outcome:**

- Develop the basic ideas of dialects, language politics and speeches
- Learning the association of language with gender, society and ethnic identity

#### Paper 8- English Language Teaching

##### **Course specific outcome:**



- Get the knowledge of approaches, methods and techniques of teaching in English
- Get the understanding of the problems of teaching in English in India and the use of teaching aids

### **B.A 3 (Annual System)**

Paper 1- Introduction to Broadcasting Radio and Television

#### **Course specific outcome:**

- Get a working knowledge and basics of Radio Broadcasting and Television
- Understanding the art and techniques of audio-visual medium

Paper 2- Entrepreneurship development

#### **Course specific outcome:**

- Get a fundamental understanding of the concepts of Entrepreneurship
- Understanding of various kinds of approaches of Entrepreneurship in India

Paper 3- Project

#### **Course specific outcome:**

- To develop research skills and get an understanding the methodology
- To motivate students to explore the new vistas through fieldwork

**Learning outcome of Functional English:**

- Ability to analyze the usage of English words in different contexts and acquire considerable flair in using broad range of vocabulary
- Understand the different aspects of media and entrepreneurship
- Develop an understanding of the various aspects of Communicative English
- Understand Functional English and its application in practical life

**Department of Education****Program B.A Education****Program Outcome**

Basically, the program help the students to understand the different dimensions of education. At undergraduate level, subject develops the necessary skills and aptitude among students to pursue B.Ed. course and opt teaching as a career in schools. The course prepares students for higher studies in education and psychology. It equips students for various avenues like research, teaching, competitive examination jobs in DIET etc.

**Program Specific Outcomes:**

On successful completion of the course students will be able to;

- ☐ Explore and understand fundamentals of education including historical and social developments both past & present and the philosophical, psychological and sociological theories on which modern education has been established.
- ☐ Understand the meaning, aims, needs and functions of education with reference to present Indian society.
- ☐ The course introduces the challenges faced by Indian education and initiates a critical analysis of concerns and solution towards better education.
- ☐ Students are equipped with the fundamentals of statistics, different measuring tools and techniques involved in measurement and evaluation.
- ☐ To enrich which the students with various issues related to role of heredity and environment in understanding human behaviour.

**B.A Semester -1**

## **Paper-1 : Principles of Education**

### **Course Outcome**

- ☐ The course content is meant to teach the student concept, need, functions and aims of education with reference to present Indian society.
- ☐ To understand the different forms and agencies of education.
- ☐ To understand the role of mass- media in education.
- ☐ To understand the National Integration and International Understanding.

### **B.A -I Semester -1**

## **Paper -2: History of Indian Education: Pre- Independence.**

### **Course Outcome**

- ☐ To understand the education system in India with reference to Vedic, Buddhist and Muslim education.
- ☐ To understand and analyse the education policy during British period.

### **B.A- I Semester-II**

## **Paper- 1: Education in Social Context**

### **Course Outcome**

- ☐ To understand the concept of educational sociology
- ☐ To understand the concept of society, education and its interrelationship.
- ☐ To understand social realities of Indian society and relationship between social change and education.
- ☐ To develop understanding of the role of education in socialization

### **B.A- I Semester-II**

## **Paper- 2: History of Indian Education**

### **Course Outcome**

- ☐ To understand the development of education system of India during post-Independence
- ☐ To understand the aims, meaning, importance of education at different stages and analyse the education policy.
- ☐ The course will help students to understand constitutional values & provisions for education.

### **B.A- II Semester-III**

## **Paper-1: Philosophical Foundations of Education.**

### **Course Outcome**

□ The course will help the students to understand the meaning, concepts, scope of philosophy education and their relationship.

□ To understand and explore various Western and Indian School of Philosophy in the present context and contribution of Great Western thinkers to educational philosophy.

### **B.A- II Semester-III**

#### **Paper-2: Child Development**

##### **Course Outcome**

□ To enable the student to understand the growth of human development and the role of heredity, environment and individual differences.

### **B.A- II Semester-IV**

#### **Paper-1: Educational Thoughts and Practices.**

##### **Course Outcome**

□ The course aims to acquaint students with the contribution of great Indian and Western thinkers to educational thoughts and practices.

□ To understand the importance of values in human life and in global development and foster the values of Indian constitution.

### **B.A- II Semester-IV**

#### **Paper-2: Educational Psychology.**

##### **Course Outcome**

□ The course introduces students about the concept of educational psychology, its scope and methods. It will enable them to acquire knowledge of learning, theories and its relevance and also help them to understand the concept of intelligence.

### **B.A- III Annual System**

#### **Paper-1: Measurement, Evaluation and Statistics in Education.**

##### **Course Outcome**

□ The course aims to enable students to understand the concept and purpose of measurement and evaluation.

□ To understand techniques involved in measurement and evaluation.

□ Students are equipped with the fundamental of statistics, classification and graphical presentation of data and measures of central tendency.

### **B.A- III Annual System**

#### **Paper-2: Systems of Education.**

**Course Outcome**

- ☐ The course aims to acquaint students with the concept, nature and basic structure of education system i.e. elementary education, secondary education and higher education & technical education in UK, USA. and India in relation to social, political, economic and geographical factors.
- ☐ It also enables student to understand national education structure as laid down in the Constitution of India.

**B.A- III Annual System****Paper-3: New Trends and Innovations in Education.****Course Outcome**

- ☐ It focuses on creativity, entrepreneurship and innovation. Students will be able to know about.
- ☐ New trends in education.
- ☐ Develop understanding of computer and its importance in education.
- ☐ State supported innovations; Sarva Shiksha Abhiyan, Eklavya Lok Jumbish Edu camp and role of UNICEF.

**B.A- III Annual System****Paper-4: Practical****Course Outcome**

- ☐ It is consisting of the psychological experiments and test.
- ☐ To familiarize students about how to conduct different psychological test & experiments related with aptitude, intelligence, adjustment, learning & perception with reference to the educational implications.
- ☐ It will give practical knowledge to students and inculcate interest in the discipline of education.

**Learning Outcomes**

- ☐ On successful completion of the program of B.A. (Education), learners will be able to understand the meaning, nature, scope and aims of Education.
- ☐ Will get acquainted with the constitutional values and educational provisions.
- ☐ Distinguish between different levels of Education system and its importance.
- ☐ Relate Education with social concern and identify the problems.

**DEPARTMENT OF PHYSICAL EDUCATION  
EDUCATIONAL OUTCOME SEMESTER-I**

<b>COURSE NAME</b>	<b>EDUCATIONAL OUTCOME</b>	<b>TEACHING APPROACH</b>
<b>Paper-I Foundations Of Physical Education</b>	Students able to know the origin and purview of Physical Education and analyze the concepts and issues pertaining to physical education.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. Internal Assessment And Viva.
<b>Paper-II History In Physical Education</b>	Students able to know the origin and development of Physical Education. They can apply the knowledge in sports activities.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. By organizing Workshop. Internal Assessment And Viva.

### **COURSE RELATED OUTCOME**

#### **DEPARTMENT OF PHYSICAL EDUCATION EDUCATIONAL OUTCOME SEMESTER-II**

<b>COURSE NAME</b>	<b>EDUCATIONAL OUTCOME</b>	<b>TEACHING APPROACH</b>
<b>Paper-I Anatomy And Physiology In Physical Education</b>	Students able to know the concepts of structure and function of human body. They can co-relate training load with principles of physiology.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. Internal Assessment And Viva.
<b>Paper-II Practical</b> <b>1. Athletics Compulsory(Track And Events Only)</b> <b>2. One Major Team Game</b>	Students able to learn the essentials of track and field. They learn, understand and apply the technical skills for better performance in event.	By conducting practical examination.

**COURSE RELATED OUTCOME**

**DEPARTMENT OF PHYSICAL EDUCATION  
EDUCATIONAL OUTCOME SEMESTER-III**

<b>COURSE NAME</b>	<b>EDUCATIONAL OUTCOME</b>	<b>TEACHING APPROACH</b>
<b>Paper- I Fitness, Wellness And Lifestyle</b>	Students can understand the physiological benefits of movement, physical activities, fitness and wellness. They can apply the concepts of fitness and wellness in their lifestyle.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. By organizing Workshop. Internal Assessment And Viva.
<b>Paper-II Health Education</b>	Students can understand the concepts of good health and wellness. To promote healthy way of living and be able to make fitness plan.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. Internal Assessment And Viva.



**COURSE RELATED OUTCOME**

**DEPARTMENT OF PHYSICAL EDUCATION  
EDUCATIONAL OUTCOME SEMESTER-IV**

<b>COURSE NAME</b>	<b>EDUCATIONAL OUTCOME</b>	<b>TEACHING APPROACH</b>
<b>Paper-I Psychological Foundation Of Physical Education</b>	<p>It explains the group mechanisms and group psychology in a sports context. It enhances the self-concepts, self esteem, self-efficacy and self-confidence.</p> <p>Students able to know the origin and psychology foundation of Physical Education and analyze the concepts and issues pertaining to physical education.</p>	<p>Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. By organizing Workshop. Internal Assessment And Viva.</p>
<b>Paper-II Practical 1. Athletics Compulsory (Field Events Only) 2. One Major Individual Game</b>	<p>Students learn about the essentials of team and individual game practices. Students can develop their skills in the particular event.</p>	<p>By conducting practical examination.</p>

## **COURSE RELATED OUTCOME**

### **DEPARTMENT OF PHYSICAL EDUCATION EDUCATIONAL OUTCOME B.A. III YEAR (ANNUAL SYSTEM)**

<b>COURSE NAME</b>	<b>EDUCATIONAL OUTCOME</b>	<b>TEACHING APPROACH</b>
<b>Paper-I Management in Physical Education</b>	Students would be able to know sports management and employ principles of strategic planning financial and human resource management.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. Internal Assessment And Viva.
<b>Paper-II Kinesiology &amp; Bio-mechanics in Physical Education</b>	Students can understand effectiveness of human movement using mechanical principles. And can identify biochemical, health, physiological and psychological limitations to and interventions for improving physical performances.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. Internal Assessment And Viva.
<b>Paper-III Introduction to Statistics &amp; Computer Application in Physical Education</b>	Students learn to prepare questionnaire, write research report and apply the basics of statistics in research. They can analyze sports data of various types via use of statistical procedures. They can understand the concept of information and communication technology in physical education.	Lecture, Special Lecture, Guest Lecture and Evaluation by Written Test. By organizing Workshop. Internal Assessment And Viva.
<b>Paper-IV Practical : Specialization (Skills &amp; Proficiency) (Games opted in 1st Year &amp; 2nd Year)</b>	It is to develop knowledge and understanding of a specialist area within the broad fields of career development.	By conducting practical examination.

## **Department of Sociology**

### **Programme Outcome –B.A. Sociology**

Sociology learning provides initial knowledge about society, social life and social interactions. It prepares an individual to social life by including values, morals and manners.

### **Programme Specific Outcome**

Sociology seeks to understand all aspects of human social behaviour. Sociologists are motivated both by the desire to better understand the principles of social life and by the conviction that understanding these principles may aid in the formulation of enlightened and effective social policy.

A general Arts Graduate and students of Sociology should able to develop:

- Critical thinking
- Sociological understanding
- Written and oral communication
- Better understanding of real life situation
- Analytical thinking
- Observation power
- Ethical and social responsibility
- Professional and career opportunities

### **Course Outcome**

#### **Course 1 (Sem 1)**

##### **Introduction To Sociology**

This introductory paper is intended to acquaint the students with sociology as a social science and the distinctiveness of its approach among the social sciences.

#### **Course 2 (Sem 1) SOCIETY IN INDIA**

The course is aimed at presenting a comprehensive integrated and empirically based profile of Indian Society.

It is hoped that the sociological perspective on Indian Society presented in this course will also enable students to gain a better understanding of the their own situation and region.

#### **Course 3 (Sem 2) BASIC CONCEPTS OF SOCIOLOGY**

The course is organised in such a way that even students without any previous exposure to Sociology could acquire an interest in the subject and follow it.

#### **Course 4 (Sem 2) INDIAN SOCIETY: ISSUES & PROBLEMS**

The course focuses upon continuity between present and past, this continuity is reflected in the structure of the course, the focus is on the contemporary Indian Society.

**Course 5 (Sem 3) FOUNDATION OF SOCIOLOGICAL THOUGHT – {1}**

Sociology originated as an intellectual response to the crisis confronting the mid 19th century European society. This paper is intended to familiarise students with the social, political, economic & intellectual contexts in which sociology emerged as a distinctive discipline.

**Course 6 (Sem 3) SOCIAL CHANGE IN INDIA**

The course is designed to provide conceptual and theoretical understanding of social change and development as it has emerged in Sociological Literature.

**Course 7 (Sem 4) WESTERN SOCIOLOGICAL THOUGHT – {2}**

Acquaintance with the writing of prominent Sociological thinkers would equip the students with the theoretical insights to know, analyse and interpret the Social scenario around them.

**Course 8 (Sem 4) SOCIAL DEVELOPMENT IN INDIA**

The course is intended to prepare the students for professional careers in the field of development planning including government, non-government and international agencies.

**Course 9 [ANNUAL PATTERN] BA 3rd PIONEERS OF INDIAN SOCIOLOGY**

This course is aimed at sensitizing the students to the diversity as well as inter-connectedness of theoretical perspective on Indian Society.

**Course 10 [ANNUAL PATTERN] BA 3rd  
SOCIAL RESEARCH METHODS**

This course plan aims to provide exposure to the fundamentals of various research techniques and methods. Exposure to field work is intended to enhance the research interests and inculcate the spirit of inquiry among students.

**Course 11 [ANNUAL PATTERN] BA 3rd  
RURAL AND URBAN SOCIETY IN INDIA**

This course plan aims to provide sociological understanding of rural Social Structure, change & development in India. The student has to be sensitised on urban dimensions of society, its social structure.

## **LEARNING OUTCOMES**

By the time of graduation sociology students should be able to

- Articulate a sociological perspective
- Apply sociological theories to understand social phenomena
- Evaluate and examine human behaviour and social phenomena
- Apply scientific principles to understand the social world
- Comprehend quality of social scientific methods and data
- Use sociological knowledge to inform policy debates and promote public understanding.

Our hope is that the course work will not only provide a solid base of Sociological Knowledge and employability skills, but also that our classroom discussions, assignments, workshops, research methodology based surveys, debates, group discussion, student seminars and other such kind of activities will foster a sense of engagement as citizens committed to making the world more humane and livable.

## **Department of Psychology**

### **Program Outcome (B.A. –Psychology)**

The program of BA in Psychology will help students of Psychology to learn basic concepts of Psychology in different areas like learning, memory, intelligence, child development, social psychology, assessment, abnormality, personality etc. It will enable them learn the theories and mechanism for explaining human thought and behavior and enhance their knowledge on practical aspects as well. They will be able to learn the applications of different methods, theories and concepts studied in Psychology.

### **Program Specific Outcome**

The course offers good progression where individuals are seeking to attain their higher studies in Psychology. This will enable the learner to become familiar with the major theories of basic psychological process, personality, sign and symptoms of abnormality, assessment of behavior and thoughts of the individual with the help of various tests and experiments. This course will also help them to learn the phenomena of social aspects about a community or society. It will enrich their knowledge about how the development of each individual takes place in different spheres of his/ her life.

**BA-I: Semester-I****Paper-I :Basic Psychological Processes****Course Outcome**

- The course aims to enable students to acquire the knowledge about the basics of psychological concepts. Students will be able to apply these concepts in their daily life. It will also give them theoretical knowledge about how their learning, cognitive processes and motivation will be modified in a positive about the history and methods used in basic research of Psychology.

**BA I Semester I****Paper-II: Statistics and Psychophysics****Course outcome**

- It will help the students to learn quantitative aspects of psychological data. It enables them to understand how to use the statistical concepts in minor researches.
- It will also enhance their knowledge about how by applying the psychophysical experiments we can learn about the relationship between stimuli and response.

**B.A I, Semester -2****Paper 1****Title of the Paper: Psychology of Individual Differences****Course Outcome:**

- To enrich the students with various issues related to the role of heredity and environment in understanding human behaviour, the neurological basis of behaviour, nature-nurture controversy and understanding of personality from different perspectives.
- Practical and experiential understanding would train student to prove their subject specific cognitive excellence at different academic and professional platforms.

**SEMESTER -2, PAPER 2****TITLE OF THE PAPER- Lab Work/ Practical**

**Course outcome:**

- \* To apply the general concepts of Psychology with the help of observations, experiments and testing. It will give practical knowledge to students and inculcate interest in the discipline of Psychology.
- \* Students will develop thorough understanding of learning, motivation, forgetting and different applications of psychophysical methods and understand their applications in daily living.

**BA-II: Semester-III****Paper-I : Life Span Development****Course outcome**

- \* To enrich the students with various issues related to human development from womb till tomb, the factual knowledge on the determinants of Biological, Physical, Motor, Cognitive, Language, Social, Emotional and Moral Development; different issues during adolescent and geriatric phase of human development; the role of individual differences and the knowledge about nervous system, affecting the behavior and thought processes of individuals.
- \* Practical and experiential understanding would train student to prove their subject specific cognitive excellence at different academic and professional platforms. Exclusive and detailed theoretical information in the area of human development would also promote students to better adjust and undergo advance studies in the area of child development in future.

**BA-II: Semester-III****Paper-II : Social Psychology****Course outcome**

At the end student would learn about the factors influencing social perception, social thinking and interpersonal influences; ways to be more effective in social situations and identify and reduce prejudices to make society a better place to live in.

**BA-II: Semester- 4****Paper-I :Effective Communication****Course outcome**

The study of this course would help students to identify the communication problems in their interpersonal relationships and applying the skills learned during classes. This will help them to develop good relationships with family members, peers, teachers and others

**BA-II: Semester- 4****Paper- II: Practical****Course outcome:**

To familiarize students about how to conduct different tests and experiments related with social psychology, human development and communication.

**B.A 3 ( Annual system)****PAPER1: PSYCHOLOGICAL ASSESSMENT****COURSE OUTCOME:**

On completion of the course the students will be able to critically evaluate assessment measures, to know the basics of test construction ,i.e. item writing and item analysis , test administration and standardization. They will know the procedure of administration and scoring of various psychological tests, like mental ability tests, special ability tests, achievement, interest and personality tests.

**B.A 3 (Annual system)****PAPER 2: PSYCHOPATHOLOGY****COURSE OUTCOME:**

Upon completion of the course students will be able to enhance personal and social interactions by using the knowledge of the major theories of abnormal behavior and will better understand one's own and others' behavior, have a more effective understanding of stress and anxiety experienced by them in various situations. Course will be able to provide a comprehensive understanding of abnormal behaviours.

**B.A 3 (Annual system)****Paper 3: PERSONALITY****COURSE OUTCOME:**

Students in this course upon completion will be able to know the various popular and scientific views in which personality has been understood including trait and type approaches, genetic and constitutional determinants of personality, and the family and social



determinants. The course will also provide a basic understanding of Self Concept – its nature and components and types as well as the study of different theories of personality, like the psychoanalytical theory .

### **B.A 3 (Annual system)**

#### **PAPER 4: PRACTICALS**

##### **COURSE OUTCOME:**

On completion of this course the students will be familiar with practical aspects of measurement of anxiety, adjustment Level and personality of Individual as well as learn skills of scale construction

##### **LEARNING OUTCOME**

After completing the program of BA in Psychology, the students would have learnt the basic concepts of Psychology in different areas like learning, memory, intelligence, child development, social psychology, assessment, abnormality, personality etc. They would have also learnt the theories and mechanisms for explaining human thought and behaviour. Further, they would have learnt various applications of different methods, theories and concepts studied in Psychology, via the means of practicals conducted during the course.

(2019-20)

पाठ्यपुस्तक का नाम

## सैद्धान्तिक माडलिंग

महर्षीय सांस्कृतिक शक्त एवं  
 भावसाहित्य, हठि से प्रबुद्ध विभाषणा  
 प्रत्येक की शक्ति, स्वतंत्र भावसाहित्य की  
 मे भावना

सूचना डीडिजिटली के क्षेत्र में हिंदी के  
दक्षता से आवश्यकता देख कर 'नीटिया' के  
अन्य भाषाओं में भी निर्माणा करना

संचार के विभिन्न माध्यमों 'संप्रसार' ने ये  
विषयों को छिपी से जोड़कर पढ़ाना  
जिससे अज्ञात के लिए भावपूर्ण सीपना  
आ भी विचार किया ना सके।

शाखाओं को प्रामाणिक प्रत्यक्ष प्रत्यक्ष संचार  
पत्र के माध्यम से शाखाओं को, इत्यादि  
की प्रामाणिक जानकारी प्रदान करना

विभाग-उपाय

“कृष्ण” व्याख्यान, माधुली-नर्मि  
विभागीय व्याख्यान, प्रयोगशाला

प्रोजेक्ट निर्माण, प्रजेक्ट राव  
बोर्डिंग मूल्य, निमित्त परीक्षा

फिल्म लूनिंग, प्रोजेक्ट निर्माण  
अभिलेख, प्रतिलिपि, सापेक्षिकता

हेल्थ, ज्ञान, अमर-मना, विद्वान  
 भक्त्या वाची लक्षण, हरदरी-  
 मरि का रोडोवक अमर

पाठ्यक्रम सम्बंधित डाइटक्रम २०१९-२०२०

हिन्दी एम० ए० चतुर्थ सेमेस्टर

शैक्षणिक डाइटक्रम

पाठ्यक्रम का नाम

विशिष्ट कवि तथा लेखक  
[पेपर I]

विशिष्ट अध्यापन  
[पेपर II]

भाषा विज्ञान  
[पेपर III]

मौखिकी  
[पेपर IV]

भारतकालीन प्राचीन कवियों तथा उनकी रचनाओं की  
ज्ञानकारी विद्यार्थियों को मिलेगी,  
पाठ्यक्रम में विशिष्ट कवि मुरदास की रचनाएं एवं ब्रजभाषा  
का विश्लेषणात्मक ज्ञान

पाठालोचन के अन्तर्गत विभिन्न कवियों एवं उनके साहित्यिक  
रचनाओं का आलोचनात्मक ज्ञान

भाषा एवं उसके उपयोगों का ज्ञान, हिन्दी भाषा  
का व्याकरणिक ज्ञान

विभिन्न कवियों एवं साहित्यकारों की व्यक्तित्व एवं  
व्यक्तित्व की ज्ञानकारी प्रदान करना

शिक्षण उपाय

व्याख्यान, विशिष्ट  
व्याख्यान, साहित्यिक गान  
लिखित परीक्षा

व्याख्यान, विशिष्ट व्याख्यान  
आंतरिक मूल्यांकन  
लिखित परीक्षा

कार्यशाला, विशिष्ट  
व्याख्यान, आंतरिक  
मूल्यांकन, लिखित परीक्षा

प्रश्नोत्तरी, समूह चर्चा  
साक्षात्कार

*Amrit*



**संस्कृत विभाग**  
**नवयुग कन्या महाविद्यालय**  
**पाठ्यक्रम: बी०ए० संस्कृत**  
**प्रोग्राम आउटकम – 2019 से 2022 तक प्रोग्राम स्पेसिफिक आउटकम**  
**कोर्स आउटकम– (2019–20) 2020–21, 2021-22 NEP-**  
**लर्निंग आउटकम**

**प्रोग्राम आउटकम–** संस्कृत सभी भारतीय भाषाओं की जननी है। भारत की संस्कृति इसी भाषा में निबद्ध वाङ्मय में है। इस भाषा, साहित्य, व्याकरण, दर्शन वेदादि का अध्ययन हुआ। छात्रों के मन, मस्तिष्क में अपनी भारतीय राष्ट्रीय चेतना के प्रति जागरूक करना और प्राचीन तथा आधुनिक ज्ञान परम्परा का समेकित रूप से अध्ययन करना है। जिसमें उनके ज्ञान के साथ-साथ माननीय मूल्यों व भारतीय संस्कृति सम्यता का ज्ञान विकसति हो सके।

तीन वर्ष का बी०ए० का पाठ्यक्रम में संस्कृत विषय के माध्यम से छात्रों में भारतीय राष्ट्रीय चेतना का विकास करना है जिससे वह अपना जीवन भौतिक समृद्धियों के साथ-साथ मानसिक व अध्यात्मिक स्तर की ऊँचाइयों को भी प्राप्त कर सकें। और उन्नत राष्ट्र के उन्नत नागरिक बन सकें।

**कोर्स आउटकम**  
**बी०ए० तृतीय वर्ष – 2019–20 (वार्षिक)**

**I<sup>st</sup> Paper: (वेदमन्त्राः अपठितांशाः, भारतीय संस्कृतिमूल)**

वेदमन्त्रों तथा उपनिषद् की जानकारी प्राप्त किया। भगवद्गीता द्वितीय अध्याय भ्रमरगीत, रामायण का संक्षिप्त सार परिचय प्राप्त किया। पुरुषार्थ चतुष्टय वर्णाश्रमधर्म, संस्कार आदि के अध्ययन से छात्रों ने प्राचीनभारतीय वाङ्मय तथा भारतीय संस्कृति के प्रति विशेष ज्ञान प्राप्त किया।

**II<sup>nd</sup> Paper: (नाटकम् व्याकरणम् छन्दः)**

नाटक अध्ययन द्वारा व्यवहार ज्ञान तत्कालीन संस्कृति का ज्ञान छात्रों ने प्राप्त किया। समास अध्ययन से पदों का अर्थ सहित ज्ञान प्राप्त किया। छन्दों के अध्ययन से संस्कृत पदों के लालित्य का अनुभव किया।

**III<sup>rd</sup> Paper: (अद्यतन संस्कृत साहित्यम्)**

इस प्रश्नपत्र में छात्रों द्वारा आधुनिक काल के कवियों के रचनाओं का अध्ययन किया गया और वर्तमान काल की सामाजिक आर्थिक, राजनीतिक परिस्थितियों व संस्कृति का बोध प्राप्त किया।

संस्कृत विभाग

बी०ए० प्रथम वर्ष प्रथम सेमेस्टर 2019–20 कोर्स आउटकम

**प्रथम प्रश्न पत्र–संस्कृत काव्य काव्यशास्त्रं च**

कोर्स आउटकम–इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं–

1. प्राचीन कवियों के कालखण्ड को समझ लेते हैं।
2. समसमायिक राजनीतिक, आर्थिक, सांस्कृतिक परिस्थितियों एवं व्यवहार शैली की समझ।
3. संस्कृत के श्लोकों के शुद्ध उच्चारण का अभ्यास कर लेते हैं।
4. काव्य लक्षण का परिचय प्राप्त कर लेते हैं।

**द्वितीय प्रश्न पत्र–व्याकरणअनुवादः संस्कृतसाहित्येतिहासः**

कोर्स आउटकम–इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं–

1. व्याकरण के संज्ञा, सन्धि, के नियम को जानकर नये शब्दों को बना लेते हैं।
2. संस्कृत भाषा में अनुवाद शैली में कुशलता प्राप्त कर लेते हैं।

बी०ए० प्रथम वर्ष द्वितीय सेमेस्टर 2019–20

कोर्स आउटकम

**प्रथम प्रश्न पत्र–संस्कृतकाव्यं काव्यशास्त्रं च**

कोर्स आउटकम–इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं–

1. प्राचीन कवियों के कालखण्ड को समझ लेते हैं।
2. समसमायिक राजनीतिक, आर्थिक, सांस्कृतिक परिस्थितियों एवं व्यवहार शैली की समझ।
3. संस्कृत के श्लोकों के शुद्ध उच्चारण का अभ्यास कर लेते हैं।
4. काव्य लक्षण का परिचय प्राप्त कर लेते हैं।

द्वितीय प्रश्न पत्र—व्याकरणअनुवाद: संस्कृतसाहित्येतिहास

कोर्स आउटकम—इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं—

1. व्याकरण के संज्ञा, सन्धि, के नियम को जानकर नये शब्दों को बना लेते हैं।
2. संस्कृत भाषा में अनुवाद शैली में कुशलता प्राप्त कर लेते हैं।

बी0ए0 द्वितीय वर्ष तृतीय सेमेस्टर 2019-20 (संस्कृत विभाग)

कोर्स आउटकम

प्रथम प्रश्न पत्र—(नाटकं गद्यकाव्यं काव्यशास्त्रं च)

कोर्स आउटकम—इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं—

1. प्राचीन कवियों के कालखण्ड को समझ लेते हैं।
2. समसमायिक राजनीतिक, आर्थिक, सांस्कृतिक परिस्थितियों एवं व्यवहार शैली की समझ।
3. संस्कृत के श्लोकों के शुद्ध उच्चारण का अभ्यास कर लेते हैं।
4. काव्य लक्षण का परिचय प्राप्त कर लेते हैं।

द्वितीय प्रश्न पत्र—व्याकरण निबन्ध: गद्यनाट्यसाहित्येतिहासश्च

कोर्स आउटकम—इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं—

1. व्याकरण के संज्ञा, सन्धि, के नियम को जानकर नये शब्दों को बना लेते हैं।
2. संस्कृत भाषा में अनुवाद शैली में कुशलता प्राप्त कर लेते हैं।
3. संज्ञा सन्धि तथा शब्दों के नियम जानकर उन्हें विभक्तियों में बना लेते हैं।

बी0ए0 द्वितीय वर्ष चतुर्थ सेमेस्टर 2019-20

कोर्स आउटकम

प्रथम प्रश्न पत्र—(नाटकं गद्यकाव्यं काव्यशास्त्रं च)

कोर्स आउटकम—इन प्रश्नपत्रों को पढ़ने पर छात्रों में इस योग्य होते हैं—

1. प्राचीन कवियों के कालखण्ड को समझ लेते हैं।
2. समसमायिक राजनीतिक, आर्थिक, सांस्कृतिक परिस्थितियों एवं व्यवहार शैली की समझ।
3. संस्कृत के श्लोकों के शुद्ध उच्चारण का अभ्यास कर लेते हैं।
4. काव्य लक्षण का परिचय प्राप्त कर लेते हैं।

द्वितीय प्रश्न पत्र—व्याकरण निबन्ध: गद्यनाट्यसाहित्येतिहासश्च

1. व्याकरण के संज्ञा, सन्धि, के नियम को जानकर नये शब्दों को बना लेते हैं।
2. संस्कृत भाषा में अनुवाद शैली में कुशलता प्राप्त कर लेते हैं।
3. संज्ञा सन्धि तथा शब्दों के नियम जानकर उन्हें विभक्तियों में बना लेते हैं।

## **DEPARTMENT OF HISTORY**

**Course: B.A. Medieval and Modern History**

### **Programme Outcome**

History is the vital source of obtain knowledge about a Nation's soul as there can't be a nation without a part. The idea behind the study of the subject is to involve young minds in knowledge production and knowledge participation.

### **Program Specific Outcome**

The three year undergraduate history programme is designed to familiarize students with significant developments in the history of India and certain other parts of the world. This also aims at providing right perception to study and understand History. The main focus is on Indian History but students will also study about European as well as other parts of the world. The purpose is to sensitize students to the perspective through which knowledge about this part is constructed. The students are encouraged to think critically, analyze different perspectives and actively process information about the past rather than became passive recipients of singular historical knowledge. An effort is made to develop terminology befitting our national context and our exploratory nature. Students will be taught through essays, project / research papers, presentations, discussions, debates etc.

The larger goal of this programme is to develop a sense of active citizenship, making responsible political choices of democratic conduct in public life.

Graduates of this programme do branch out to different spheres of knowledge and domains of professional work, besides pursuing higher studies within the discipline. These wider life skills of argumentation and communication, attitudes and temperaments would ultimately enable learners to live meaningful lives.



## **COURSE OUTCOME**

### **Semester-I, Paper I**

#### **History of Medieval India (1206-1526AD)**

#### **NEP 2020 - Delhi Sultanate, Political Aspect (1206-1526 AD)**

### **Course Outcome**

The study of this paper will enable students to:

1. Understand the major shift in Indian History, the advent of the Turkish rule in India.
2. They will be familiarized with Political events taking place during the period under study and also will be able to notice the nature of historical developments.
3. Students will understand the functioning of Turkish Political system and shall also notice the changes brought about in India.

### **Semester-I, Paper-II**

#### **Middle Ages in Europe upto 30 years War**

### **Course Outcome**

After the course the students will acquire in depth knowledge about:

1. Coming of the modern times in the western world.

2. Religious reform movements in Europe.
3. Rules of Spain, England & France – Domestic and foreign policy

### **Semester-II, Paper-III**

#### **History of Medieval India (1526-1739 AD)**

#### **NEP-2020 –Mughal Empire, Political Aspects(1526-1739)**

#### **Course Outcome**

The course outcome would be:

1. With progression to the Mughal period, students develop a deeper insight about the evolution of medieval political and administrative institutions.
2. The complete knowledge of the Medieval History of India strengthens their eligibility to join school teachers training programmes after completing their graduation.
3. They will also be prepared for competitive examinations.

## **Semester-II, Paper-IV**

### **History of Europe 1600-1789**

#### **Course Outcome**

1. The political events in various countries of Europe.
2. The foreign policy of European Nations
3. The American War of Independence
4. The causes of the French Revolution of 1789

## **Semester-III, Paper-V**

### **History of Modern India (1740-1857)**

#### **NEP-2020-Modern India Political Aspects (1740-1857)**

#### **Course Outcome**

1. Students will become acquainted with yet another significant change in Indian History, the advent of European powers in India and their struggle for supremacy among them
2. They learn a systematic and gradual expansion of British rule in India, through diplomacy and battles.
3. The stress on causes and consequences of the various battles and political changes enable students to identify the factors leading to sustenance of the British rule.
4. It gives students a knowledge of early phase of constitutional development of India.

### **Semester-III, Paper-VI**

#### **History of Europe 1789-1848**

##### **Course Outcome**

After the completion of this course:

1. The three French revolutions – 1789, 1830, 1848
2. The development of various ideologies
3. Domestic affairs of a few European nations

### **Semester-IV, Paper-VII**

#### **History of Modern India (1858-1947)**

##### **NEP-2020-Modern India (1858-1947) Political and Administrative Aspects**

##### **Course Outcome**

1. The content of this paper gives students understanding in changes in internal political scenario of India during the rule of British Crown.
2. They also understand Foreign policy of India during the colonial period.
3. Students get an overview of constitutional development of India through various stages.
4. Students are able to discern the germination of Indian Nationalism.

## **Semester-IV, Paper-VIII**

### **History of Europe 1848-1918**

#### Course Outcome

1. The political events in various countries of Europe.
2. The foreign policy of European nations
3. Domestic affairs of few European countries.
4. Events leading to the world war I

## **Semester-V, Paper- IX**

### **Freedom Struggle and Constitutional development of India(1858-1947)**

#### **NEP-2020- Freedom Struggle of India(1858-1957)**

#### Course Outcome

1. Students become acquainted with the arising of nationalist sentiments and resistance towards the colonial policies.
2. They learn about the challenges posed by the Indians to their British rulers.
3. They understand the importance and the real nature of first armed resistance of the Indian people.
4. Develop an insight into the evolution of different ideologies of Nationalism and are able to make a critical appraisal of them.

### **Semester-V, Paper-X**

#### **History of Europe 1919-1929**

##### **Course Outcome**

1. World War-I and its aftermath.
2. The political events in various countries of Europe.
3. The foreign policy of few European nations.
4. The League of Nations and its functions
5. The coming of the Great Depression

### **Semester-V, Paper-XI**

#### **Social-Cultural and Economic History of India(1206-1739 AD)**

##### **NEP 2020- Paper 11A, Title as above**

##### **Course Outcome**

1. Students learn about the vital aspects of the cultural development of India through the processes of assimilation and adaptations through the period under study.
2. Emphasis on Bhakti and Sufi Movements leads to a comprehensive understanding of the evolution of the composite culture of India.
3. Learners get acquainted with architectural and cultural aspects of medieval heritage both tangible and intangible.

### **Semester-VI, Paper-XII**

## **Freedom Struggle and Constitutional Development of India (1905-1947)**

### **NEP-2020- Freedom Struggle of India (1858-1957)**

#### **Course Outcome**

1. Students get an extensive knowledge of the constitutional development of India during the latter part of the British rule till India's independence.
2. They learn about different streams of the national struggle, ideologies and ideological conflicts.
3. Students gain a comprehensive knowledge about Gandhian movements and fundamentals of his philosophy and ideology regarding the freedom struggle.
4. They are able to understand role of Revolutionaries in the correct perspective.

#### **Semester-VI, Paper-XIII**

### **History of Europe 1929-1945**

#### **Course Outcome**

1. Rise of Nazism and fascism in Europe
2. World War-II: Origins, courses, events, aftermath
3. United Nations and the emergence of the Cold War

#### **Semester-VI, Paper-XIV**

### **Social-Cultural and Economic History of Modern India (1740-1947 AD)**

#### **NEP-2020- Title as same**

## **Course Outcome**

1. Students get an exhaustive knowledge of problems, challenges and issues faced by the contemporary Indian society.
2. They are able to understand the efforts made by the British government and Indian reformists to eradicate social evils and dogmas through various social reform movements.
3. They develop an insight into the intricacies of Indian economic system during the colonial rule and also about the laying of foundations of the modernization of India.
4. Students become aware of the eminent personalities who contributed immensely towards cultural, spiritual and political progress of India.

## **Course Learning Outcome**

1. After completing this programme, student is expected to:
  - Describe significant developments within historical contexts, covered in the syllabus.
  - Identify and analyze the significance of historical changes that take place within a society or culture.
  - Explain the patterns of such transitions
2. Formulate arguments based on a historiographical engagement.
3. Engage with scholarly writings and presentations.
4. Answer, questions, write essays and research papers.
5. Work collaboratively.



## Department of Mathematics

### B.A. /B.Sc. Mathematics (2019-20)-(2020-21)

#### Programme Outcomes

- i) Ability to communicate mathematical ideas clearly using correct mathematical terminology and proper mathematical notation and use their mathematical knowledge to solve problems.
  - ii) Develop appreciation and competency for application of mathematical approaches and techniques to variety of problems and applications to problems in other disciplines such as engineering, business and other decisional sciences.
  - iii) Prepare sound mathematical base for enhancing understanding in interdisciplinary subjects such as physics, engineering, computer science etc. and for pursuing further Master's Degree in Mathematics or Engineering/Computer science/Business/Economics
  - iv) Utilize mathematical skills to coach school and colleges students or enhance their own career prospects through pursuit of advanced degree in mathematics or full-fill prerequisites of eligibility for various national and international competitive examinations.
- Programme Specific Outcomes**

- i) To formulate, analyze, and solve problems through application of fundamental mathematical techniques
- ii) To develop the ability to determine the validity of a given argument, develop mathematical thinking and be able to solve mathematical problems and construct mathematical proofs independently.
- iii) To demonstrate an understanding of the foundations of various branches of mathematics and apply the same to formulate and develop mathematical arguments in a logical manner
- iv) Apply knowledge and mathematical skills to translate information presented into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.
- v) Investigate and apply mathematical solutions in a variety of contexts related to science, technology, business and industry, and illustrate these solutions using symbolic, numeric, or graphical methods.
- vi) Build a solid foundation for higher studies in mathematics and other disciplines requiring quantitative techniques and enhancing their career prospects through success in competitive examinations for further academic progression or placement in various positions requiring mathematical or quantitative background as a pre-requisite.

## **B.A. /B.Sc. Semester I**

### **Paper I: Differential Calculus**

#### **Course Outcomes:**

This course is to introduce the basic tools of differential calculus and geometric properties of different type of functions of real variables.

#### **Course specific Outcomes:**

This course will enable the students to:

1. Know the concepts of calculus, namely, limits, continuity, differentiability and their applications in the form of mean value theorem and Taylor's theorem.
2. Understand real valued functions, sequences and series, their convergence.
3. Sketch curves in a plane using its mathematical properties in the different coordinate systems of reference.
4. Apply derivatives in Optimization, Social sciences, Physics and Life sciences etc.
5. Get knowledge of curvature, envelopes and evolutes.

### **Paper II: Integral Calculus**

#### **Course Outcomes:**

To understand the integration of bounded functions on a closed and bounded interval and its extension to the cases where either the interval of integration is infinite, or the integrand has infinite limits at a finite number of points on the interval of integration.

#### **Course specific Outcomes:**

The course will enable the students to learn about:

1. Some of the families and properties of Riemann integrable functions, and the applications of the fundamental theorems of integration.
2. Beta and Gamma functions and their properties.
3. The valid situations for the inter-changeability of differentiability and integrability with infinite sum, and approximation of transcendental functions in terms of power series.
4. 4. Compute area of surfaces of revolution and the volume of solids by integrating over cross-sectional areas.

## **B.A. /B.Sc. Semester II**

### **Paper I: Matrices & Differential Equations**

#### **Course Outcomes:**

The subjects of the course are designed in such a way that they focus on developing mathematical skills in algebra, calculus and analysis.

#### **Course specific Outcomes:**

This course will enable the students to:

1. Find the rank and eigen values of matrices.
2. Study the system of linear homogeneous and non- homogeneous equations.
3. Comprehend the geometric meaning of differential equations.
4. Configure various types of differential equations and develop problem solving skills for solving the same.

## **Paper II: Geometry**

### **Course Outcomes:**

The students learn and visualize the fundamental ideas about coordinate geometry and learn to describe some of the surfaces by using analytical geometry.

### **Course specific Outcomes:**

On successful completion of the course students have gained knowledge about regular geometrical figures and their properties. They have the foundation for going for higher course in geometry.

## **B.A. /B.Sc. Semester III**

### **Paper I: Algebra**

#### **Course Outcomes:**

Group theory is the building blocks of modern algebra. The course is to introduce the fundamental theory of groups, rings and their homomorphisms. Symmetric groups and group of symmetries are also studied in detail. Fermat's Little theorem as a consequence of the Lagrange's theorem on finite groups.

#### **Course specific Outcomes:**

#### **The course will enable the students to:**

1. Recognize the mathematical objects that are groups, and classify them as abelian, cyclic and permutation groups, etc.
2. Link the fundamental concepts of Groups and symmetrical figures.
3. Analyze the subgroups of cyclic groups.
4. Explain the significance of the notion of cosets, normal subgroups, and factor groups.

### **Paper II: Mathematical Methods.**

**Course Outcomes:**

The course gives emphasis to enhance student's knowledge of functions of two variables, Laplace Transforms, Fourier series.

**Course specific Outcomes:**

On successful completion of the course students should have gained knowledge about higher different mathematical methods and will help them in going for higher studies and research.

**B.A. /B.Sc. Semester IV****Paper I: Differential Equations****Course Outcomes:**

The main objectives of this course are to familiarize the students with various methods of solving differential equations of first and second order with several applications.

**Course Outcomes:** The course will enable the students to

1. Formulate Differential Equations for various Mathematical models.
2. Solve first order non-linear differential equation and linear differential equations of higher order using various techniques.
3. Apply these techniques to solve and analyze various mathematical models.

## **Paper II: Mechanics**

### **Course Outcomes:**

The course aims at understanding the various concepts of basic mechanics like simple harmonic motion, motion under other laws and forces.

### **Course Outcomes:**

The course will enable the students to understand:

1. The significance of mathematics involved in physical quantities and their uses.
2. To study and to learn the cause-effect related to these.
3. The applications in observing and relating real situations/structures.

## **B.A. /B.Sc. Semester V**

### **Paper I: Numerical Analysis**

#### **Course Outcomes:**

To comprehend various computational techniques to find approximate value for possible root(s) of non-algebraic equations, to find the approximate solutions of system of linear equations and ordinary differential equations. Also, the use of Computer Algebra System (CAS) by which the numerical problems can be solved both numerically and analytically, and to enhance the problem solving skills.

#### **Course specific Outcomes:**

The course will enable the students to learn the following:

1. Some numerical methods to find the zeroes of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision.

2. Interpolation techniques to compute the values for a tabulated function at points not in the table.
3. Applications of numerical differentiation and integration to convert differential equations into difference equations for numerical solutions.

## **Paper II: Linear & Abstract Algebra**

### **Course Outcomes:**

The objective of this course is to introduce the fundamental theory of two objects, namely – rings and vector spaces, and their corresponding homomorphisms. Classification of all finite Abelian groups (up to isomorphism) can be done.

### **Course specific Outcomes:**

The course will enable the students to learn about:

1. The fundamental concept of Rings, Fields, subrings, integral domains and the corresponding morphisms.
2. The concept of linear independence of vectors over a field, the idea of a finite dimensional vector space, basis of a vector space and the dimension of a vector space.
3. Basic concepts of linear transformations, the Rank-Nullity Theorem, matrix of a linear transformation, algebra of transformations and the change of basis.
4. Automorphisms for constructing new groups from the given group
5. External direct product applies to data security and electric circuits.
6. Group actions, Sylow theorems and their applications to check nonsimplicity.
7. Compute inner products and determine orthogonality on vector spaces.

## **Paper III: Linear Programming**

### **Course Outcomes:**

This course develops the ideas underlying the Simplex Method for Linear Programming Problem, as an important branch of Operations Research. The course covers Linear Programming with applications to Transportation, Assignment and Game Problem. Such problems arise in manufacturing resource planning and financial sectors.

**Course specific Outcomes:**

This course will enable the students to learn:

1. Analyze and solve linear programming models of real life situations.
2. The graphical solution of LPP with only two variables, and illustrate the concept of convex set and extreme points. The theory of the simplex method is developed.
3. The relationships between the primal and dual problems and their solutions with applications to transportation, assignment and two-person zero-sum game problem.

**B.A. /B.Sc. Semester VI****Paper I: Analysis****Course Outcomes:**

The course aims at providing the basic knowledge pertaining to metric spaces such as open and closed balls, neighborhood, interior, closure, subspace, continuity, compactness, connectedness etc. This course aims to introduce the basic ideas of analysis for complex functions in complex variables. Particular emphasis has been laid on Cauchy's theorems, series expansions and calculation of residues.

**Course specific Outcomes:**

The course will enable the students to:

1. Understand the basic concepts of metric spaces.
2. Know the concepts such as open balls, closed balls, compactness, connectedness etc.



3. Understand the significance of differentiability of complex valued functions leading to the understanding of Cauchy-Riemann equations.
4. Evaluate the contour integrals and understand the role of Cauchy-Goursat theorem and the Cauchy integral formula.
5. Expand some simple functions as their Taylor and Laurent series, classify the nature of singularities, find residues and apply Cauchy Residue theorem to evaluate integrals.

## **Paper II: Differential Geometry & Tensor Analysis**

### **Course Outcomes:**

This course aims at introducing the basic concepts of tensors and understands the role of Tensors in Differential Geometry.

### **Course specific Outcomes:**

By the end of this course students will be able to-

1. Explain the concept of differentiable geometry.
2. Understand the concepts of tensors in differentiable geometry.
3. Apply various concept of differential calculus in tensors.

## **Paper III: Discrete Mathematics**

### **Course Outcomes:**

This course aims at introducing the concepts of lattices, Boolean algebras, switching circuits and graph theory. The course discusses some important applications of Boolean algebra and graph theory in real life situations through switching circuits and shortest path algorithms.

### **Course specific Outcomes:**

After the course, the student will be able to understand the concepts of:

1. Lattices and their types;
2. Boolean algebra, switching circuits and their applications;
3. Graphs, their types and its applications in study of shortest path algorithms.

Department of Statistics

## **Department of Statistics**

### **Programme Outcome**

Students having Degree in B.A./ B.Sc. (with Statistics) should have knowledge of different concepts and fundamentals of Statistics and ability to apply this knowledge in various fields of industry, monitoring, policy making, administration, government organisations etc. They may pursue their future career in the field of Statistics and Research.

### **Programme Specific Outcomes (PSOs):**

- 1) After completing B.Sc. (with Statistics) the student should have Knowledge of different concepts, principles, methodologies and tools (skills) of Statistics.
- 2) Ability to collect, tabulate, represent graphically, analyze and interpret data/information by using appropriate statistical tools.
- 3) Ability to identify and solve a wide range of problems in real life/industry related to Statistics.
- 4) Familiarity with computational techniques and statistical software including programming language (e.g. R) for mathematical and statistical computation.
- 5) Capability to use appropriate statistical skills in interdisciplinary areas such as finance, health, agriculture, government, business, industry, telecommunication and bio- statistics.

- 6) Ability to compete with industrial/private sector demand in the field of data analysis, marketing survey, etc. in professional manner and pursue their future career in the field of Statistics.
- 7) Ability to develop original thinking for formulating new problems and providing their solutions. As a result, they will be able to pursue higher studies or research in the field of Statistics.

### **SEMESTER-I**

#### **Paper –I (Probability Theory)**

##### **Course Outcomes:-**

- Ability to understand the concept of probability along with basic laws and axioms of probability.
- Ability to understand the terms mutually exclusive and independence and their relevance.
- Ability to identify the appropriate method (i.e. union , intersection, conditional, etc) for solving a problem.
- Ability to apply basics probability principles to solve real life problems.
- Ability to understand the concept of random variable (discrete and continuous ),concept of probability distribution.

#### **Paper –II (Statistical Methods)**

##### **Course Outcome:**

- Knowledge of Statistics, its scope and importance in various fields.
- Ability to understand concepts of sample vs. population and difference between different types of data.
- Knowledge of methods for summarising data sets, including common graphical tools (such as boxplots, histograms and stemplots). Interpret histograms and boxplots.
- Ability to describe data with measures of central tendency and measures of dispersion.
- Ability to understand measures of skewness and kurtosis and their utility and significance.

### **SEMESTER II**

## **Paper –I (Probability distributions t & numerical analysis)**

### **Course Outcome:**

- Knowledge of discrete distributions.
- Discuss appropriate distribution: negative binomial, Poisson, etc. with their properties and application of discrete distribution models to solve problems.
- Knowledge of continuous distributions. Discuss the appropriate distribution (i.e. uniform, exponential, normal, etc.) with their properties and application of continuous distribution models to solve problems.
- Knowledge of Non parametric distributions and their properties
- Knowledge of Numerical Integration.
- Knowledge of interpolation and extrapolation

## **SEMESTER II**

### **PRACTICAL (Lab Work)**

### **Course Outcome:**

After completing this course a student will have:

- Knowledge of presenting data through graphs and diagrams and interpretations of data.
- Knowledge of various measures of frequency distributions.
- Knowledge of curve fitting, regression lines.
- Knowledge of observing correlation between variables.
- Knowledge of Numerical Integration.
- Knowledge of interpolation and extrapolation

## **SEMESTER III**

### **Paper I: (Statistical Inference)**

#### **Course Outcome:**

- Ability to understand the difference between parameter & statistic and standard error & standard deviation.
- Knowledge of the sampling distribution of the sum and mean.
- Knowledge of the concept of Point and Interval Estimation and discuss characteristics of a good estimator.
- Ability to understand and practice various methods of estimations of parameters.
- Knowledge of the terms like null and alternative hypotheses, two-tailed and one-tailed alternative hypotheses, significant and insignificant, level of significance and confidence, p value etc.
- Ability to understand the concept of MP, UMP and UMPU tests
- Ability to understand under what situations one would conduct the small sample and large sample tests (in case of one sample and two sample

## **SEMESTER III**

### **Paper II:(Sampling techniques)**

#### **Course Outcome:**

- Ability to understand the concept of sampling and how it is different from comp enumeration.
- Knowledge of various probability and non-probability sampling methods along estimates of population parameters
- Ability to identify the situations where the various sampling techniques shall be used
- Knowledge of sampling and non-sampling errors.
- Knowledge of regression and ratio methods of estimation in simple random sampling(SRS)

## **SEMESTER IV**

Paper I: (Analysis of variance and design of experiments)

Course Outcome:

After completing this course a student will have

- Knowledge of the concept of Analysis of Variance (ANOVA).
- Ability to carry out the ANOVA for One way and Two way Classification.
- Ability to carry out the post-hoc analysis.
- Knowledge of the concept of Design of experiment and its basic principles.
- Ability to perform the basic symmetric designs CRD, RBD and LSD with and without missing observations.
- Knowledge of the concept of factorial experiments and their practical applications.

## **SEMESTER IV**

### **PRACTICAL (Lab Work)**

After completing this course a student will learn

- Select random sample using random number table
- Estimate mean and variance in various sampling schemes and their comparison
- Apply various small and large sample tests
- Carry out Analysis of Variance of design of experiments in CRD,RBD,LSD and Factorial Experiments.

### **B.Sc III (Annual) :**

Paper I: (Non-parametric methods and regression analysis)

Course Outcome:

After completing this course a student will have:

- Ability to understand the basic concepts of vector space and matrices in order to study multivariate distribution.
- Knowledge of the applications of multivariate normal distribution and Maximum Likelihood estimates of mean vector and dispersion matrix.
- Ability to apply distribution free tests (Non-parametric methods) for one and two sample cases.

## **Paper II : Applied Statistics**

### **Course Outcome:**

- Familiarity with different aspects of Statistical Quality Control in manufacturing units.
- Ability to understand the concept of Sampling Inspection plans for products.
- Knowledge of Statistical tools to be applied in Educational Statistics.
- Familiarity with various scaling procedures. Knowledge to understand the concept of statistical quality control and different control charts for variables and attributes.
- Familiarity with different aspects of Applied Statistics and their use in real life situations.
- Ability to understand the concept of Time series along with its different components.
- Knowledge of Index numbers and their applications along with different types of Index numbers.
- Familiarity with various demographic methods and different measures of mortality and fertility.
- Ability to understand the concept of life table and its construction.

## **Paper III : Operations Research**

### **Course Outcome:**

- An idea about the historical background and need of Operations research.

- Ability to identify and develop operational research models of the real life problems from the verbal description
- Knowledge of the mathematical tools that are needed to solve optimization problems. 4) Ability of solving Linear programming problem, Transportation and Assignment problems, Replacement problems, Job sequencing, etc.
- An idea about the historical background and need of Queuing Theory.
- Ability to identify and develop operational research models from the verbal description of the real life problems.
- Knowledge of the mathematical tools that are needed to solve optimization problems.
- Ability of solving Network Analysis models. Knowledge of Project Management.

### **PRACTICAL (Lab Work)**

#### **Course Outcome**

- A Student will learn to solve linear programming problems
- will learn to calculate index numbers,
- will learn to construct life table and calculate various death rates and fertility rates
- Test hypothesis using non parametric tests.

## **Department of Zoology**

#### **Programme Outcome**

1. Zoology is one of subject of B.Sc programme of ZBC.
2. It help to develop scientific temper & prove to be beneficial for the students.
3. After undergraduate , students have the option to go for higher studies i.e. M.Sc.
4. Science graduates can go to serve in industries.



### **Programme Specific Outcome**

1. Get the applied knowledge in animal science
2. Knowledge of animal/ insect ,birds and reptiles for the benefit of society.
3. Inculcate interest of the student in animal sciences.

### **Course Outcome**

1. The course develop in scientific temper and attitude, which surely beneficial for society since scientific knowledge always make the society to grow up.
2. Knowledge and skill in the fundamentals of animal sciences.
3. Course inculcate good laboratory practices among the students and a knowledge of proper handling of lab instruments.

### **Learning Outcome**

1. The students will be able to understand, classify and identify the different types of tissue.
2. The students will understand the complexity of various tissues the students will be able to learn structure & functions of various tissues.
3. The students will understand the various diseases related to organs.

## **Department of Botany**

### **Course and learning Outcomes**

*The learning outcome of the courses are-*

The students will develop thorough understanding of the plant kingdom. The division of plant on the basis of flowers i.e Cryptogams (non-flowering) and phanerogams (flowering). Cryptogams include Algae, fungi, bryophyte and pteridophytes. Phanerogams include gymnosperm and angiosperms. After the successful completion of the topic students will be able to understand the basic concepts of cell, the difference between prokaryotic and eukaryotic organisms. They can also learn the principle of cell biology. They get the detailed knowledge about-

Algae: General character, systematic position, their occurrence, thallus organization, cell wall composition, mode of reproduction, types of life cycle they follow and their economic importance.

Fungi: General character, classification, systematic position and economic importance.

Bryophyte: General character, theories of origin of bryophyte, classification, economic importance.

Pteridophyte: General character, Classification, theories of origin of pteridophyte, division of pteridophyte, evolution of stelar system and economic importance.

Gymnosperm: General character, classification, distribution of gymnosperm and economic importance.

Angiosperm: Identification of plants on the basis of morphology, taxonomic description of plant specimen, know the plant anatomical structures and the pattern of development, differentiate between meristematic and permanent tissues, normal and abnormal secondary growth, structure and development of flower, female gametophyte, male gametophyte, development of fruits and seeds

The students will develop thorough knowledge of the basic concepts of Biostatistics which will help in designing the experiments and setting up of hypothesis to be tested within the collection of data. It also help the students in solving the problems related to Classical or Mendelian Genetics, Numerical Taxonomy, Population Dynamics and for various Demographic Studies such as Natality, Mortality, Migration etc. The course helps in the presentation of data through suitable tables, diagram, graphs etc. It can also be applied to draw valid information from the data collected or predict the future prospect from the data. They could be used to grasp and learn the basic approach in the Research Methodology.

## **Program: B.Sc. Chemistry**

### **SESSION 2019-2020**

#### **Program Outcome**

After completion of B.Sc. degree, the students would understand the importance of the elements of periodic table and their chemical and physical properties including their uses in daily life. They will be able to correlate the concepts of chemistry with other subjects such as mathematics, physics, biology, etc. the students will gain the theoretical as well as practical knowledge about the chemicals and handling them. They would learn the laboratory skills and will be able to transfer and interpret knowledge entirely in the working environment. They would have skills required for chemical industries such as fertilizer, rubber, cement, paint, food processing, pharmaceutical, agro, petrochemical, polymer, semiconductor, cosmetic, etc. they will also be able to have opportunities in government services to serve society as health inspector, food safety officer, pharmacist, lab technician, etc.

#### **Program Specific Outcome**

After graduation with B.sc. Chemistry the students will have disciplinary knowledge, laboratory skills, communication skills, critical and scientific thinking, skill of analytical reasoning and problem solving as well as moral and ethical awareness. They will have comprehensive knowledge and understanding of both theoretical and experimental knowledge in organic, inorganic and physical chemistry. The students will be able to explain, integrate, and apply relevant knowledge to interdisciplinary and multi-disciplinary problems. The students will be able to develop critical and scientific thinking using basic concepts of chemistry. They will be able to conduct chemical synthesis, analysis, and other chemical investigations, compile raw data and give logical conclusion. The students will be able to prepare the results of scientific work in written and communicate it to the peers and the public. They will appreciate the central role of chemistry in society.

#### **B. Sc. I- Semester-I**

Paper-I: Inorganic Chemistry

Course Outcome

- The students will gain knowledge about structures of atoms, associated rules, chemical bondings, periodic properties of elements, important parameters associated with elements, and importance of chemistry of elements.
- They will gain precise insight into solid state chemistry including ionic structures and various defects in crystals as well as chemistry of s-block and p-block elements and noble gases.

## Paper-II: Organic Chemistry

### Course Outcome

The students will be able to

- Understand different types of organic compounds and to give the IUPAC name of the given organic compounds.
- Understand the basics of chemical reactions, i.e, Reagent, Substrate, Electrophile, Nucleophile, Homolytic and Hetrolytic fission, Inductive effect, etc.
- Understand different types of isomerisms and recognize and draw structures of constitutional isomers, stereoisomers, enantiomer, diastereomer, racemic mixtures and meso compounds.
- Understand basic principles of organic chemistry, various types of reactive intermediates, and derive mechanism of various types of organic reactions.
- Understand the nomenclature, isomerism, preparation and properties of alkanes and cycloalkanes.
- Understand the concept of aromaticity and structure, preparation and reactivity of various aromatic compounds as well as reactivity and stereochemistry of SN1 and SN2 reactions of alkyl and aryl halides.

## B.Sc. I-Semester-II

### Paper-I: Physical Chemistry

The students will be able to

- Understand the basics of computer and mathematical concepts of log, permutation, combination, factorials probability, equation of straight line, slope and tracing of curves, and differentiation and integration of some relevant functions.

- Understand fundamental concepts of solid, liquid, gaseous and colloidal states and liquid crystals and its various types.
- Understand the critical phenomenon and the importance of chemical kinetics and catalysis.

#### Paper-II: Chemistry Practical

The students will

- Be able to analyse the given inorganic mixture and identify acidic and basic radicals.
- Be able to write chemical reactions.
- Understand various tests to identify radicals.
- Be able to make solutions accurately.
- Gain knowledge about different types of reactions.

### **B.Sc. II- Semester-III**

#### Paper-I: Physical Chemistry

Course Outcome

The students will be

- Able to understand fundamental concepts of first law and second law of thermodynamics, enthalpy, entropy, Gibbs-Helmholtz equation, etc.
- Familiar with concepts of conductance, equivalent conductance, Kohlrausch's law, Ostwald dilution law, types of electrodes, Cells, Debye-Huckel-Onsager equation, pH, pKa, etc.

#### Paper-II: Chemistry Practical

Course Outcome

The students will be

- Able to recognise the given organic compound on the basis of its chemical and physical properties.

- Able to prepare derivatives.
- Able to solve problems by interpreting some properties of liquids and solids.
- Able to recognize, use, and compare the colligative properties.
- Able to explain various reactions based on kinetics.

## **B.Sc. II-Semester-IV**

### Paper-I: Inorganic Chemistry

#### Course Outcome

The students will be able to

- Understand the chemistry of transition and inner- transition elements.
- Understand the concepts of coordination chemistry and their applications.
- Understand the fundamental concepts of oxidation-reduction reactions.
- Understand the various concepts of acids and bases and their importance.
- Understand the different aspects of non-aqueous solvents and their importance.

### Paper-II: Organic Chemistry

#### Course Outcome

The students will be

- Familiar with the preparation and chemical reactions of alcohols, ethers, and epoxides.
- Able to understand the preparation, reactions and order of reactivity of different carboxylic acids and their derivatives.
- Able to recognize structures of acid halides, esters, amides, acid anhydrides, their synthesis and reactions.
- Familiar with the structures of phenol and phenoxide ions and chemical reactions of phenols.
- Able to understand the mechanism of named reactions of carbonyl compounds and condensation reactions.
- Able to understand synthesis of aldehydes and ketones and their reactions.
- Familiar with the preparation, properties and stereochemistry of amines.

### **B.Sc. III (Annual System)**

#### **Paper-I: Inorganic chemistry**

Course Outcome:-

The students will be

- Able to understand semi-modern concepts of metal ligand bonding in coordination compounds.
- Familiar with thermodynamic and kinetic aspects of metal complexes.
- Understand basic concepts of magnetic properties and electronic spectra of transition metal complexes.
- Familiar with organometallic compounds, silicones, phosphazenes and bonding in them.
- Able to understand HSAB Principle and its application.
- Familiar with essential and trace elements and their role in biological process and Hemoglobin and myoglobin.

#### **Paper-II: Organic Chemistry**

Course Outcome:-

The students will

- Acquire Knowledge of different spectroscopic methods and their applications.
- Develop a comprehensive knowledge of organometallic compounds e.g. Grignard reagent and organo-sulphur compounds and their synthesis, reactions and applications.
- Familiar with carbohydrates, its classification and uses.
- Able to understand amino acids, peptides, proteins and their classification and synthesis as well as chemical structure DNA and RNA.
- Develop a comprehensive knowledge of various polymers, polymerization methods, and their uses in industry.
- Familiar with chemistry of fats, oils, detergents and synthetic dyes.
- Have knowledge of organic synthesis via enolates.

#### **Paper-III: Physical Chemistry**

Course Outcome:-

The students will acquire knowledge of

- Basic concepts of introductory Quantum mechanics such as Black body radiation, Photoelectric effect, Compton effect, etc.
- Fundamental concepts of Elementary quantum mechanics such as Schrodinger wave equation, Molecular orbital theory, valence bond model of hydrogen etc.
- Rotational spectrum of diatomic molecules and concepts of Infrared, Raman and electronic spectrum.
- Sigma, pi-antibonding and non-bonding molecular orbitals.
- Ideal and non-ideal solutions, Fundamental concepts of dilute solutions such as colligative properties, Raoult's law, law of osmotic pressure etc.
- Basic principles of photochemistry and their applications.

Paper-IV: Chemistry Practical

Course Outcome:-

The students will be able to:-

- Handle instruments and its calibration
- To separate compounds chromatographically.
- Able to make solutions accurately to perform conductance experiment.
- Prepare some organic and inorganic compounds in laboratory.
- To understand making circuit connections and taking observations.

## **LEARNING OUTCOME**

After completing the program of B.Sc. in Chemistry, the students would have learnt basic concepts of theoretical and experimental chemistry. They would have comprehensive knowledge and understanding of organic, inorganic and physical chemistry. The students would have able to explain, integrate, and apply relevant knowledge to interdisciplinary and multi-disciplinary problems. The students would have develop critical and scientific thinking and able to conduct chemical synthesis, analysis, and other chemical investigations, compile raw data and give logical conclusion.



## Department of Physics

### Program Outcome

After graduation with B.Sc. the students would understand the importance of Physics and its uses in daily life. They will be able to correlate the concepts of physics with other subjects such as mathematics, chemistry, biology, etc. the students will gain the theoretical as well as practical knowledge about the electricals and optical apparatus and handling them. They would learn the laboratory skills and will be able to transfer and interpret knowledge entirely in the working environment. They would have skills required for physical industries such as nuclear physics, material science, pharmaceutical, semiconductor material etc. they will also be able to have opportunities in government service to serve society as scientist, Engineers officer, lecturer, lab technician, etc.

### Program Specific Outcome

After graduation with B.Sc. physics the students will have disciplinary knowledge, laboratory skills, communication skills, critical and scientific thinking, skill of analytical reasoning and problem solving as well as moral and ethical awareness. They will have comprehensive knowledge and understanding of both theoretical and experimental knowledge in mechanic, optics, quantum, electricals and nuclear physics. The students will be able to explain, integrate, and apply relevant knowledge to interdisciplinary and multi-disciplinary problems. The students will be able to develop critical and scientific thinking using basic concepts of physics. They will not only prepare running models but also analyse them, will be able to perform other investigations and compile the resulting data to give a logical conclusion. The students will be able to prepare the results of scientific work in written and communicate it to the peers and the public. They will appreciate the central role of physics in society.

### B. Sc. I- Semester-I

Paper-I: Mechanics and Wave Motion

#### Course Outcome

- ❖ The students would clearly understand the conflict between Newtonian mechanics and special relativity and thus would know the progress of the revolutionary scientific ideas is made through logical evidences and observations.
- ❖ They would have a clear understanding of dynamics conservation and non-conservation, difference between inertial and non-inertial frames, work for planetary motion and galactic motion, apply the properties of oscillations and wave motion.

- ❖ Learn how does a body oscillate without damping amplitude and what are the necessary condition for it.
- ❖ Learn how to we can set any object in the forced oscillation that is in continuous motion.

## Paper-II: Circuit Fundamentals and Basic Electronics

### Course Outcome

The students will be able to

- Understand different types of Bridges such as A. C. bridge, Maxwell's Wein bridge and Thevenin etc.
- Understand the basics of semiconductors, intrinsic and extrinsic semiconductors, n-type and p-type semiconductors etc.
- Understand different types of diodes and its biasing. They also understand diode characteristics and working, diode as a rectifier.
- Understand basic principles of Bipolar transistors, transistor biasing circuits, basic equivalent circuits etc.
- Understand the concept of elements of transmission and reception, basic principles of amplitude modulation and demodulation.

## • B.Sc. I-Semester-II

### Paper-I: Optics

The students will be able to

- Understand the electromagnetic nature of light, superposition of light waves and basics properties of light such as interference, diffraction and polarisation.
- Understand difference of diffraction and interference using different methods and its applications.
- Understand the resolving power, Rayleigh's criterion of resolution, resolving power of grating and telescope.
- Understand the concept of optical activity and Fresnel's explanation, specific rotation, half shade and biquartz polarimeters Jones matrices etc.

### Paper-II: Physics Practical

The students will

- Be able to observe the given experiment.
- Be able to write theory and formulas.
- Understand various experiments.
- Be able to make accurate observation.
- Gain knowledge about different types of physics experiments.

## **B.Sc. II- Semester-III**

### **Paper-I: Electricity and Magnetism**

#### **Course Outcome**

The students will be

- Able to understand fundamental concepts of electric charge and types of electric charge densities, coulomb's law general expression and Gauss's law (applications) etc.
- Gain knowledge about magnetics effects of currents, magnetic field, Biot-Savart law, Ampere's circuital law and its applications etc.
- Able to understand time varying electromagnetic fields and electromagnetic waves.

### **Paper-II: Physics Practical**

#### **Course Outcome**

The students will

- Be able to observe the given electricity and magnetism experiment.
- Be able to write theory and formulas.
- Be understand various experiments.
- Be able to make observation accurately.
- Be able to recognize, use, and compare electrical and electricity.
- Gain knowledge about different types of diodes with help experiment.

## **B.Sc. II-Semester-IV**

### **Paper-I: Thermal Physics and Elementary Statistical Mechanics**

#### **Course Outcome**

The students will be able to

- Understand transport phenomena in gases
- Understand fundamental concepts of zeroth law, first law and second law of thermodynamics, enthalpy, entropy, Gibbs-Helmholtz equation, etc.
- Understand fundamental concepts of statistical, probability macrostate and microstate
- Understand several basic universal laws in statistical mechanics such as position space, phase space, ensembles and quantum statistics.

### **Paper-II: Elements of modern Physics**

#### **Course Outcome**

The students will be

- Basic concepts of introductory Quantum mechanics such as Black body radiation, Photoelectric effect, Compton effect etc.
- Explain atomic structure and dual nature of electron, Bohr's model, de-Broglie hypothesis.
- Fundamental concepts of Elementary quantum mechanics such as Schrodinger wave equation and its applications.
- Molecular spectra, X-ray, rotational spectrum of diatomic molecules and concepts of Infrared, Raman and electronic spectrum.
- Acquire Knowledge of different spectroscopic methods and their applications.

## **B.Sc. III (Annual System)**

### **Paper-I: Elements of Classical Relativistic and Statistical Mechanics**

#### **Course Outcome**

The students will be

- Able to understand constrained motion, constraints, degree of freedom, generalized coordinates.
- Understand Limitation of newton's law, introduction to calculus of variations, D'Alembert's principle.
- Understand basic concepts of Lagrange's and Hamilton's principle and its applications
- Understand several basic universal laws in statistical mechanics such as position space, phase space, ensembles and quantum statistics.

#### Paper-II: Solid State Physics and Nuclear Physics

Course Outcome

The students will

- Develop a comprehensive knowledge of Crystal structure, crystal diffraction and reciprocal lattice, crystal binding and its applications.
- Develop a comprehensive knowledge of properties of nucleus, nuclear forces, nuclear models. And fundamental laws of radioactivity, half-life period and mean life etc.
- Understand basic concepts of quarks models, elementary particles and its applications.

#### Paper-III: Electronics

Course Outcome

The students will

- Develop a comprehensive knowledge of diffusion of minority carries in semiconductors, p-n junction of diodes, Zener diode effects of temperature on junction diode.
- Acquire knowledge of transistor parameters, base width modulation, transit time and life time of minority carriers.
- Understand current and voltage gain, biasing formulae for transistors, base bias, emitter bias and mixed types biasing for small and large signal operation.
- Field effect transistors and this characters, biasing of FET, use in preamplifiers, MOSFET and this simple uses.
- Basic principles of hybrid model and Y parameter equivalent circuit, input and output impedances.

## Paper-IV: Physics Practical

### Course Outcome

The students will be able to

- Handle instruments and its calibration.
- Understand making circuit connections and taking observations.
- Verify the various laws and theories with help of different apparatuses.

### LEARNING OUTCOME

After completing the program of B.Sc. in physics, the students would have learnt basic concepts of theoretical and experimental physics. They would have comprehensive knowledge and understanding of classical physics, quantum mechanics, nuclear physics and solid state etc. The students would have able to explain, integrate, and apply relevant knowledge to interdisciplinary and multi-disciplinary problems. The students would have developed critical and scientific thinking and able to perform different experiments and compile results with observation tables and give logical conclusion.

## Department of Commerce

### M.Com( Pure Commerce)

#### Programme Outcomes

After Completing Masters in Commerce (M.Com) the students will be able to: □ Develop an ability to apply knowledge acquired in problem solving in practical life and management of business activities. □ Inculcate ethical values, team work, leadership and managerial skills moulding students into future visionaries, management leaders that are compassionate yet efficient. □ Develop innovative thought processes and nurture open-mindedness, equitability and perseverance. □ Develop teaching and research talent in students and to create academic expertise suiting to contemporary needs of the society. □ Adopt a reflective approach to personal development and embrace the philosophy of continual professional development.

### **Specific Programme Outcomes**

After the completion of the M.Com Course, a student should be able to: • Pursue Research in his chosen area. • Become successful Entrepreneurs. • Teach in Colleges and Universities after qualifying the requisite tests. (NET/SET) • Work in Banking and Insurance sector as executives after qualifying requisite test. □ Pursue professional courses such as CA/CS/CMA/CFA. □ Work as Accountants in Corporations. □ Work as Executives in Marketing and Sales. □ Work as Managers in Organizations. □ Work as investment and tax consultants after internship in suitable organizations.

### **M. Com Semester I**

#### **MC- 101 : ACCOUNTING THEORY AND PRACTICE**

##### **COURSE OBJECTIVES**

The course aims at to provide indepth knowledge of Accounting Theory to the students.

#### **MC- 102 : FINANCIAL MANAGEMENT**

##### **COURSE OBJECTIVES**

he aim of the course is to provide conceptual understanding of the subject as well as its importance in the corporate organisation's overall performance. It equips the students with the tools and techniques used by a Financial Manager while making financial investment and dividend decisions.

#### **MC- 103 : DIRECT TAX LAW AND ACCOUNTS**

##### **COURSE OBJECTIVES**

The course aims at to provide students indepth knowledge of laws and accounts relating to Income-Tax.

#### **MC – 104 : INDIAN AND GLOBAL BUSINESS ENVIRONMENT**

##### **COURSE OBJECTIVE**

The course develops ability to understand and scan business environment, analyse opportunities and take decisions.

#### **MC – 105 : MARKETING MANAGEMENT**

##### **COURSE OBJECTIVE**

The purpose of this course is to develop an understanding of the underlying concept, strategies and the issues involved in the exchange of products and services.

### **M. Com Semester II**

#### **MC- 201 : ACCOUNTING FOR BUSINESS DECISIONS**

**COURSE OBJECTIVES**

The course develops ability of economics decision making among the students.

**MC- 202 : INDIRECT TAX LAW AND ACCOUNTS****COURSE OBJECTIVES**

The course aims at to provide students indepth knowledge of laws and accounts of Goods and Services Tax with custom duties.

**MC – 203 : ENTREPRENEURIAL DEVELOPMENT****COURSE OBJECTIVES**

The course aims at to impart and inculcate entrepreneurial skills among the students.

**MC- 204 : LABOUR LEGISLATION****COURSE OBJECTIVES**

The course aims at to impart knowledge of the laws relating to Labour – Welfare, etc. and their applications.

**MC – 205 : INDIAN FINANCIAL SYSTEM****COURSE OBJECTIVE**

The objective of this course is to enable the students to comprehend the framework of the Indian Financial System and the interplay of financial markets, institutions and services operating in the economy.

**M. Com Semester III****MC- 301 : CORPORATE ACCOUNTING****COURSE OBJECTIVES**

The course aims at to impart and inculcate the knowledge of detailed accounting process and reporting requirements of companies among the students.

**MC – 302 : FINANCIAL REPORTING SYSTEM & PRACTICES****COURSE OBJECTIVES**

The objective of this course is to enable the students to learn Role of Accounting Standards in Financial Reporting, International Financial Reporting Standards, overview of Financial Reporting System, Corporate Financial Reporting, Accounting for Corporate Restructuring Reporting of Amalgamation, Absorption, Internal Restructuring, External Restructuring Accounting & Reporting for Corporate Damage. Segmental Reporting, Reporting for borrowing cost, Foreign currency transactions, Interim reporting, CSR



Reporting, Reporting for Non Profit and Public Sector Organisation, Public Utilities, Environmental Reporting, Recent Developments in Financial Reporting.

### **MC – 303 : HUMAN RESOURCE MANAGEMENT**

#### **COURSE OBJECTIVES**

The course aims at familiarizing the students of the significance and role of HRM in working of the modern organizations and to expose them to human resource processes and practices with special reference to India.

### **MC- 304 : MANAGEMENT OF SMALL BUSINESS**

#### **COURSE OBJECTIVES**

The course aims at to impart indepth knowledge of organisation and finance of a small business and small-scale industries basically in India.

### **MC- 305 : INTERNATIONAL MARKETING**

#### **COURSE OBJECTIVE**

The course is designed to provide an exposure of the environmental dynamics of international business and their impact on the international business operations of a firm and to acquaint them with the conceptual framework, policies and procedures of international marketing management.

### **MC- 306 : PROJECT PLANNING AND CONTROL**

#### **COURSE OBJECTIVE**

The course is designed to provide overview on Project Planning, Capital Expenditure and Capital Budgeting, Facets of Project Analysis, Financial and Technical Feasibility Study, Method of Resource Allocation, Generation and Screening of Project Ideas. Analysis of Market and Demand, Demand forecasting, marketing planning, technical analysis relating for material and manufacturing process. Analysis relating to Project. Unit Cost of capital of the Project. Project Monitoring and control – Tools and techniques, Net Working – PERT & CPM.

### **M. Com Semester IV**

### **MC- 401 : TAX PLANNING AND MANAGEMENT**

#### **COURSE OBJECTIVES**

The course aims at basically to sharpen the skills of the students to enable them to plan and manage their tax affairs.

## **MC – 402 : BUSINESS RESEARCH METHODOLOGY**

### **COURSE OBJECTIVE**

The course is designed to provide sufficient theoretical inputs to conduct varied types of researches relating to different problems of industry and business for accurate prediction, decision and control action.

## **MC-403 : BUSINESS ANALYSIS AND FORECASTING**

### **COURSE OBJECTIVES**

The course aims at to equip the students with advance knowledge of methods and techniques relating the business analysis and forecasting.

## **MC- 404 : STRATEGIC COST ACCOUNTING**

### **COURSE OBJECTIVES**

The course aims at to impart and inculcate the knowledge of controlling and effective management of cost among the students.

## **MC- 406 : SECURITY ANALYSIS & PORTFOLIO MANAGEMENT**

### **COURSE OBJECTIVES**

The course aims at to equip the students with Nature & Scope of Investment Management. Investment Objectives, Investment Process, Investment Management and Portfolio Management.

## **MC-407 : SPECIALISED ACCOUNTING**

### **COURSE OBJECTIVES**

The course aims at to impart and inculcate the knowledge of Accounting for Special Entities Accounting for Electricity Companies, Banking Companies & Insurance Companies. Value Added Statements, Value Chain Analysis, Human Resource Accounting and Audit, Brand Accounting, Social Responsibility Accounting, Environmental Accounts, Lease Accounting, Accounting for financial instruments.

## **B.Com**

### **PROGRAMME OUTCOMES**

The Bachelor of Commerce (B.Com) is one of the most sought-after career oriented professional programs offered at the bachelor's level by the University of Lucknow. A bachelor's degree in Commerce opens up innumerable career options and opportunities for

aspiring professionals and managers both in India and abroad. Pursuing this bachelor's degree also prepares one to start a business of his/ her own in the capacity of an entrepreneur. The curriculum is designed and refined to make the students familiar with the right blend of theory and practice to learn all aspects related to business and commerce. By pursuing this course, the students shall gain indepth knowledge and analytical skills which would make them into future entrepreneurs, businessmen or professionals working in the field of commerce. This programme offers great career options and opportunities for students by providing them with relevant core and specific knowledge skills in the discipline of Commerce. 1. This programme would provide qualified graduates to the corporate sector, banking sector, insurance sector, financing service sector to meet their employment requirements. 2. Students can gain specialization in the field of Accounting, Costing, Finance and Taxation and acquire application oriented skills. 3. Students can independently Start-up their own Businesses as well as avail of self employment opportunities. 4. This programme imparts skills to students to sharpen their decisions making abilities both at personal & professional level. 5. Students will gain thorough knowledge in the field of finance and commerce and stand out in any organization. Students will develop an attitude for working efficiently and effectively in the business environment.

### **PROGRAMME SPECIFIC OUTCOMES**

After completion of the course the students will acquire an indepth understanding of the core and new disciplines of the commercial world.

1. Students can become efficient managers in the field of Banking and Insurance.
2. Students can acquire practical skills and take up jobs as Accountants, Management Accountants, Audit Assistants and Executives in multinational companies.
3. After undergoing special training students may enrol to operate in the Stock markets.
4. Students can excel in different professional exams like C.A., C.S., CMA & MBA.
5. After clearing the requisite exam students can qualify for various Government jobs.
6. After undergoing a specialised course, students can become Tax and Financial Consultants.
7. Students can go for higher education and research in the field of finance and commerce.

### **B. Com Semester I**

#### **Paper I : Financial Accounting**

##### **Course Outcome:**

The student will be able to :- ☐ Acquire knowledge in the basic concepts and conventions of accounting. ☐ Prepare accounts of a partnership firm. ☐ Prepare accounts of special kinds such as Royalty accounts, Voyage accounts and Branch accounts. ☐ Prepare accounts as per norms in case of Hire Purchase & Instalment Purchase as well as Insolvency of the business units. ☐ Gain insight into

the Indian & International accounting standards as well as IFRS. □ Develop skills in understanding and analysing the contents incorporated in books and accounts.

## **Paper –II : Business Organisation**

### **Course Outcome:**

The students will be able to: □ Understand basics about business organization and its various forms. □ Understand the Social Responsibility of Business towards the various groups of the society □ Get knowledge about computation and fixation of remuneration of labour and incentive plans. □ Gain insight about features of stock exchanges, commodity exchanges and their working as well as regulation. □ Gain knowledge of the new pattern of business operations and organisations i.e., Ebusiness, LLP, OPC. □ Understand the various elements of organisation. □ Acquaint themselves with the global changes in the business arena.

## **Paper III Micro Economics –**

### **Course Outcomes:**

After studying all materials and resources presented in the course, the student will be able to: 1. Explain the role of scarcity, specialization, opportunity cost and cost/benefit analysis in economic decision-making. 2. Identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output. 3. Summarize the law of diminishing marginal utility; describe the process of utility maximization. 4. Calculate supply and demand elasticities, identify the determinants of price elasticity of demand and supply, and demonstrate the relationship between elasticity and total revenue. 5. Describe the production function and the Law of Diminishing Marginal Productivity; calculate and graph short-run and long-run costs of production.

## **Paper IV - CURRENCY, BANKING AND EXCHANGE**

### **Course outcome**

The paper Currency, banking and exchange provides students with a sound theoretical base in various areas of banking and exchange. It acquaints students with various concepts of banking and exchange Provides knowledge about various banks and their working.

## **Paper V- Essential of Management**

### **Course Outcomes**

Upon successful completion of this course the students will be able to:

- Map the evolution of 'Management' as a discipline and as a process that helps in the analysis of internal and external environment.
- Understand of the various aspects of Planning and decision making, and of Authority and Responsibility in a formal organization • Organise, motivate and lead in an organization • Understand Control functions and make simple applications

## **Paper VI- Business Communication**

### **Course Outcomes**

Upon successful completion of this course the students will be able to: • Apply principles of effective communication in their verbal and non-verbal communication. • Write effective e-mails, memos, and business correspondence. • Illustrate presentation skills • Plan effective business meetings • Identify communication barriers

## **B.Com. – Semester II**

### **Paper I : Company Accounts**

#### **Course Outcome:**

The student will be able to :- ☐ Understand the features and accounting treatment of Shares and Debentures. ☐ Knowledge about Accounting entries related to Redemption of Shares and Debentures. ☐ Prepare of Company's Final Accounts. ☐ Acquire knowledge of accounting procedure adopted during Amalgamation and Absorption of companies. ☐ Acquire conceptual knowledge of Internal and external reconstruction of companies and their accounting treatment. ☐ Knowledge regarding accounting treatment and procedure adopted at the time of winding up of companies.

### **Paper II : Business Laws**

#### **Course Outcome:**

The students will be able to:- ☐ Understand the nature and meaning of contracts, forms of contracts and essentials of a valid contract. ☐ Gain insight into various kinds of contract. ☐ Gain indepth knowledge of Sales of Goods Act and Negotiable Instruments Act ☐ Understanding the rights, duties and responsibilities as a vendor and as a consumer. ☐ Have knowledge of the fundamentals of Consumer Protection Act. ☐ Keep updated about the amendments in these laws and regulations.

### **Paper III :Micro Economics- Exchange and Distribution**

#### **Course Outcome:**

The students will be able to clearly understand the micro economic concepts and will be able to think and comprehend economic issues on a day to day basis. Illustration of concepts in terms of practical problems using elementary mathematics will help them to gain indepth insight and equip them to analyze the real economic situations more effectively.

### **Paper IV :BANKING OPERATIONS**

#### **Course Outcome:**

After learning this course, students would be acquainted with the knowledge of the functioning of the banking industry, especially that of India.

### **Paper V Human Behaviour at Work**

#### **Course Outcome:**

After learning this course, students will be able to know developments in Organizational Behaviour, meaning, significance of perception for understanding human behaviour, perception process and factors influencing perception, factors influencing personality, motivation and goal directed nature of human behaviour, conflict management, group dynamics and leadership

### **Paper VI- Concepts in Valuation**

#### **Course Outcomes**

Upon successful completion of this course the students will be able to: • Develop a thorough understanding of present and future value concepts • Grasp the techniques to estimate and analyze all types of Annuities • Fully understand the concepts of Fixed Income Securities and estimation of present and future values of their cash-flows • Develop a thorough knowledge of the concepts of Variable income securities (Shares) along with the knowledge of their Issuance and Trading in Capital Markets

## **Paper I : Business Finance**

### **Course Objective:**

The objective of the course is to familiarise students with the concept of finance, associated costs, capital structure and working capital management. Course Outcome: The students will be able to:- □ Demonstrate an understanding of the overall role and importance of the finance function. □ Understand the role and responsibilities of a Finance Manager in an organisation. □ Gain knowledge of the concept of cost of capital, capitalisation; over and under capitalization. □ Have knowledge about the long and short term sources of finance as well as the Capital Market. □ Apply ratio analysis as a tool of managing and controlling finances of a business entity. □ Analyse the complexities associated with working capital management, and the financing approaches to working capital.

## **Paper II : Principles and Practice of Marketing**

### **Course Outcome:**

The students will be able to:- □ Have knowledge about marketing and its functions □ Understand what is a product, its classifications and product life cycle □ Gain knowledge about the mechanism of price determination of a product in various markets □ Understand the need and significance of distribution channels □ Gain insight into the concept of advertising and how it affects the buying habits of a consumer □ Understand and trap the psyche of consumer in order to market a product.

## **Paper III- Statistical Methods**

### **Course Outcome:**

The course content of this paper has been designed with the assumption that students have no knowledge or rudimentary knowledge of Business Statistics. The purpose is to enhance student's understanding of the fundamentals of statistics. In this paper the students will be imparted the knowledge about the measures of descriptive as well analytical statistics and their application in different fields. These fields may include business, trade, industry, macroeconomic indicators, social phenomenon, day to day activities etc. Through the study of this paper, students will become acquainted with specific skills of data collection, processing, presentation and application of statistical tools on these data. This is how they will know the characteristics of data and learn analysis, interpretation and prediction of unknown data.

## **Paper IV- Public Finance**

### **Course outcomes:**

1. To introduce students to the public sector reform agenda with a focus on public finance issues; 2. To demonstrate administrative, political, and economic constraints to public finance reforms; 3. To develop analytical skills of the students in three major areas of public finance reforms (performance-based budgeting, mid-term financial planning, budget decentralization); 4. To train students how

to develop budgeting and performance evaluation systems for public sector institutions; 5. To develop students' skills on how to write a public policy paper and make a presentation on public policy issue.

### **Paper V- Selling and Advertising**

#### **Course Outcomes**

Upon successful completion of this course the students will be able to demonstrate strong conceptual knowledge in the selling and advertising, students will be able to demonstrate its application for resolution of problems pertaining selling and advertising.

### **Paper VI - Managing Human Resources**

#### **Course Outcomes**

Upon successful completion of this course the students will be able to: • Develop the basic understanding about the importance of HR function • Learn the various concepts of Human Resource Management processes required to Induct and Recruit the employees • Develop the basic knowledge of Training and Performance Appraisal of employees • Learn important issues related to Compensation and Wage Administration

### **B.Com. – Semester IV**

#### **Paper I : Cost Accounting**

##### **Course Outcomes:**

The students will be able to:- □ Understand the nature and scope of Cost Accounting. □ Gain knowledge about the advantages of cost accounting and classifications of various costs. □ Acquire knowledge about accounting and control of material cost and labour cost. □ Know overhead costing as well as and Apportionment and Absorption of Overheads. □ Understand the methods of costing, marginal costing and budgetary control system. □ Gain knowledge of Unit or Output costing as well as standard costing.

#### **Paper II : Contemporary Audit**

##### **Course Outcomes:**

The students will be able to :- □ Understand the concept, types & techniques of audit. □ Gain Knowledge of audit documentation vouching and verification of Assets and Liabilities. □ Understand provisions regarding appointment of a company auditor and learn about his powers and duties □ Have knowledge of Special provisions regarding Government Audit. □ Gain insight into audit of special entities and emerging concepts in auditing as well as auditing and assurance standards. □ Understand the real life skills in the ascertainment of cost in various types of products and services.



### **Paper III- FOREIGN TRADE OF INDIA**

#### **Course Outcome:**

Through the study of this subject, students will be able to understand the underlying motives of international trade. They will know the composition, direction and volume of trade over a period of time. This subject will keep students abreast with the current status and changing dynamics of India's foreign trade as well as the impact of policy changes on it. With this robust foundation, students will be well equipped when employed, whether in the field of industry or trade (export-import).

### **Paper IV- EXPORT IMPORT PROCEDURES & DOCUMENTATION**

#### **Course Outcome:**

After learning this course, students would understand the rules, regulations, procedures and documentation to be followed for export-import trade in India.

### **Paper V -Introduction of International Business**

#### **Course Outcome:**

After learning this course, students would understand the concepts of the international business, reasons for entering into International Business, modes of entry, Concept of MNC, TNC. WTO - structure, functions and roles in the current international business scenario, concept and various levels of international economic integration, major regional trade agreements, features of European Union, SAARC, NAFTA, ASEAN, SAFTA, Limitations of Regional Economic Integration, BRICS, International financial institutions, Future trends in international business, concepts of FDI and Portfolio investments .

### **Paper VI- Information Systems and E-Commerce**

#### **Course Outcomes**

Upon successful completion of this course the students will be able to: • Develop the functional knowledge of Computer Systems • Develop the thorough understanding of various Information Systems with particular focus on DSS, MIS, TP, EIS and, CRM Systems • Understand the basic knowledge of the applications of Database Management Systems and their development • Understand the concepts of E-Commerce with an application orientation

### **B.Com III year (Annual System)**

#### **Paper I : Insurance Laws and Accounts**

##### **Course Outcome:**

The students will be able to:- □ Gain knowledge about the concept & purpose of insurance, Double insurance, Over insurance, Under-insurance and Re-insurance. □ Gain insight about the Theories, Principles and Contracts of Insurance. □ Learn various policies, Terms & conditions and Types of Life Insurance. □ Gain knowledge regarding basic principles of Fire Insurance contracts, fire policy, assignment and Claims. □ Acquire knowledge on Principles, Types, Conditions, Warranties in Marine Insurance policy as well as marine losses.

## **Paper II : Income Tax Law and Accounts**

### **Course Outcomes:**

The students will be able to:- □ Know about the basic concept of Income Tax. □ Understand the provisions of Income tax in order to minimize the ultimate tax liability by setting off loss due to agricultural Income. □ Understand the provisions relating to residential status and incidence/charge of Tax. □ Compute total income under five Heads of Income i.e. Salaries, House Property, Profits & Gains from Business & Profession, Capital Gains and Other Sources. □ Acquire knowledge of the provisions and procedure for clubbing & aggregation of incomes and set-off & carry forward of losses. □ Understand provisions about appeal & revision, tax penalties, offence and prosecutions.

## **Paper III : Contemporary Audit**

### **Course Outcomes:**

The students will be able to :- □ Understand the concept, types & techniques of audit. □ Gain Knowledge of audit documentation vouching and verification of Assets and Liabilities. □ Understand provisions regarding appointment of a company auditor and learn about his powers and duties □ Have knowledge of Special provisions regarding Government Audit. □ Gain insight into audit of special entities and emerging concepts in auditing as well as auditing and assurance standards. □ Understand the real life skills in the ascertainment of cost in various types of products and services.

## **Paper IV-Indian Economic Structure**

**Course outcome**

The paper provides students understand the basics of our economy. It acquaints students with changing dimensions of our economy. It also provides students knowledge about various policies and programmes run by our government and their impact on our economy.

**Paper V -Marketing Practice and Finance****Course Outcome:**

The students will be able to:- □ Have knowledge about marketing and its functions □ Understand what is a product, its classifications and product life cycle □ Gain knowledge about the mechanism of price determination of a product in various markets □ Understand the need and significance of distribution channels □ Gain insight into the concept of advertising and how it affects the buying habits of a consumer □ Understand and trap the psyche of consumer in order to market a product.

**Paper VI- Macro Economics****Course Outcomes**

Students who complete this course will be able to understand: the meaning of unemployment and inflation data and how that data is collected and computed; the meaning and components of the National Income Accounts, especially GDP; the meaning of the business cycle and its phases; and to manipulate the basic Aggregate Supply, Aggregate Demand model of the macro economy; how fiscal policy operates, its tools, and its advantages and drawbacks; how a fractional reserve banking system works; how monetary policy operates, its tools, and its advantages and drawbacks

**Paper VII- Trade Of India****Course Outcome:**

Through the study of this subject, students will be able to understand the underlying motives of domestic and international trade. They will know the composition, direction and volume of trade over a period of time. This subject will keep students abreast with the current status and changing dynamics of India's foreign trade as well as the impact of policy changes on it. With this robust foundation, students will be well equipped when employed, whether in the field of industry or trade (export-import).

**Paper VIII APPLIED AND BUSINESS STATISTICS****Course Outcomes:**

On completion of this course, the students will be able to: Describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis; Critically evaluate the underlying assumptions of analysis tools; Understand and critically discuss the issues surrounding sampling and significance; Discuss critically the uses and limitations of statistical analysis; Solve a range of problems using the techniques covered; Conduct basic statistical analysis of data.

### **Programme : Bachelor of Education Programme (B.Ed.)**

#### **Programme Outcomes (PO)**

- Pedagogical skills
- Teaching competency
- Effective Communication
- Professional ethics
- Scientific temperament
- Psychological attitude towards students
- Management & Team work abilities
- Ability of problem solving
- Critical thinking
- Action research
- Positive approach

#### **Programme Specific Outcomes (PSO)**

- Enable to understand learner and his learning environment, contemporary India and education, school management, gender, school and society.
- Enable to comprehend Language across the curriculum, Reading and reflecting on Texts, Drama and Art in Education, developing Communication Skills and observation of school activities by school internship.
- Understand the individual differences among students, measuring the attainment, evaluating progress, and assessing learning abilities, guidance and counseling programmes, educational technology, ICT and lesson planning.

- Practice teaching in Schools, inculcate the real experiences of classroom teaching and online teaching by using ICT and its different tools and software.
- Understand the classroom diversities and enable them to deal with diverse learners in inclusive classroom setup, environmental education, Field Engagements with community and Community Participation (NSS, Community Services etc.)

### **Course Outcomes (CO)**

<b>Semester - 1</b>	
<b>Title</b>	<b>Course Outcomes</b>
<b>Compulsory Papers</b>	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ know and understand the Indian thinkers who contributed in education .</li> <li>➤ know and understand the fundamentals of the western philosophy on education.</li> <li>➤ know and understand the different aspects of social and political set up in context of teacher education.</li> <li>➤ know and understand the role of education for the teachers to cement the national and emotional integration in a multi linguistic –pluralistic society.</li> </ul>
<b>1. Philosophical and Sociological Perspective of Education</b>	
<b>2. Psychological Perspective of Education</b>	
<b>3. Technological Perspective of Education</b>	

	<p>components</p> <ul style="list-style-type: none"> <li>➤ familiar with the steps involved in the construction of programmed learning</li> <li>➤ describe the concept of ICT in education and appreciate the scope of ICT for improving the personal productivity and professional competencies</li> <li>➤ acquaint with different approaches of ICT integration in education</li> </ul>
<b>Optional Paper</b>	
<b>4. Innovations in Education</b>	<p>To enable the pupil teacher to:</p> <ul style="list-style-type: none"> <li>➤ To develop awareness of various innovative practices and experiments in education.</li> <li>➤ To develop awareness in contemporary modern issues and inspiring Innovations around the Globe.</li> <li>➤ To enable students to develop innovative trends for growth and healthy living.</li> <li>➤ To develop understanding of technical devices for inspiring innovations around the Globe.</li> </ul>
Practicum (Educational Psychology Practical)	<p>The Pupil teacher will be able to-</p> <ul style="list-style-type: none"> <li>➤ To use the test and experiment in school condition</li> <li>➤ To know the procedure of administration and interpretation of the results of different types of Test and Experiment.</li> <li>➤ Course- <ul style="list-style-type: none"> <li>A. Tests</li> <li>➤ 1. Intelligence Test- Raven's Progressive matrices/any other verbal or nonverbal intelligence test.</li> <li>➤ 2. Personality Test- High School Personality Questionnaire.</li> <li>➤ 3. Test of Study habit- Palsane and Sharma Study Habit inventory.</li> </ul> </li> <li>➤ Experiment <ul style="list-style-type: none"> <li>➤ 1. Memorisation by Paired Association Method</li> <li>➤ 2. Free Association</li> <li>➤ 3. Transfer of training through mirror drawing</li> </ul> </li> </ul>

Professional Development	<p>To enable the pupil teacher to:</p> <ul style="list-style-type: none"> <li>➤ To enhance self confidence, self esteem and improve overall personality.</li> <li>➤ To sensitize themselves about proper behaviour, socially and professionally in formal and informal situations.</li> <li>➤ To understand to contribute themselves as a responsible member and citizen of their local, national and international community.</li> <li>➤ To develop skills and techniques for effective communication and public speaking.</li> <li>➤ To acquaint ,groom, train and prepare themselves for job requirement.</li> <li>➤ To understand the importance of Aestheticism in human life.</li> <li>➤ To develop interest in the Leisure time activities.</li> <li>➤ To understand the use of Drama as pedagogy.</li> <li>➤ To understand the use of Role Play technique in the teaching- learning process.</li> <li>➤ To understand to integrate singing method in teaching - learning process.</li> <li>➤ To understand the various Dance forms and then integrate in educational practices.</li> <li>➤ To use drawing, painting, sketches, cartoon making etc in teaching learning process.</li> <li>➤ To develop creativity through different creative Art &amp; Craft forms.</li> <li>➤ To understand the efficacy of different Art forms in education.</li> <li>➤ To understand the Well Being and Total Physical Fitness in one's life.</li> <li>➤ To understand &amp; develop the attitude towards Yoga practices for healthy life.</li> <li>➤ To understand &amp; develop attitude towards neutrality</li> </ul>
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	<p>service to all sections of society irrespective of their categories for Disaster Management &amp; its Preparedness.</p> <ul style="list-style-type: none"> <li>➤ To understand and develop interest in gardening as a leisure time activity.</li> </ul>
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Semester - 2	
Title	Course Outcomes
<b>Compulsory Papers</b>	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ Acquaint themselves with the concept of biology.</li> <li>➤ Familiarize themselves with the concept of curriculum, text books and co- curricular activities in biology.</li> <li>➤ Prepare a lesson plan .</li> <li>➤ Understand some important areas of biology.</li> </ul>
<b>1 &amp; 2 School Knowledge and Pedagogy of School Subject - 1 &amp;2</b>	
Teaching of Biology	
Teaching of Science	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ Acquaint themselves with the concept of science.</li> <li>➤ Familiarize themselves with the concept of curriculum, text books and co- curricular activities in science.</li> <li>➤ Prepare a lesson plan .</li> </ul> <p>Understand some important areas of science.</p>
Teaching of Mathematics	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ study and to develop an understanding of the different aspects of teaching mathematics.</li> <li>➤ study and Understand the objectives of teaching mathematics</li> <li>➤ study and Understand the Methods and Skills of teaching mathematics.</li> <li>➤ study and Understand the use of Club and the teacher's</li> </ul>



	capacity making facilities in the teaching of mathematics.
Teaching of English	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ Know and understand the history &amp; importance of Language as a second Language.</li> <li>➤ know and Understand the aspects of Language &amp; the theoretical Knowledge of the different structures of the Language.</li> <li>➤ develop the professional competencies regarding the different aspects of Language.</li> <li>➤ Know and Understand the different skills of of teaching English in classrooms.</li> </ul>
Teaching of Hindi	<p>छात्रों को हिंदी भाषा में शिक्षण करने में सक्षम बनाने के लिए निम्नलिखित क्षमताओं को विकसित करना है:</p> <ul style="list-style-type: none"> <li>➤ छात्रों को हिंदी भाषा के इतिहास और महत्व के बारे में जानकारी देना।</li> <li>➤ छात्रों को हिंदी भाषा के व्याकरण और अर्थशास्त्र के बारे में ज्ञान देना।</li> <li>➤ छात्रों को हिंदी भाषा के व्याकरण और अर्थशास्त्र के बारे में ज्ञान देना।</li> <li>➤ छात्रों को हिंदी भाषा के व्याकरण और अर्थशास्त्र के बारे में ज्ञान देना।</li> <li>➤ छात्रों को हिंदी भाषा के व्याकरण और अर्थशास्त्र के बारे में ज्ञान देना।</li> </ul> <p>छात्रों को हिंदी भाषा में शिक्षण करने में सक्षम बनाने के लिए निम्नलिखित क्षमताओं को विकसित करना है:</p>
Teaching of Economics	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of Economics.</li> <li>➤ Develop teaching competencies related to Economics at secondary level.</li> <li>➤ Become effective teachers in order to perform desired role as Economics teacher.</li> <li>➤ Familiarize themselves with the type of audio visual aids, techniques and methods of teaching required for teaching of Economics.</li> <li>➤ Evaluate students performance and provide remedial teaching.</li> </ul>
Teaching of Commerce	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of commerce.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Develop teaching competencies related to commerce at secondary level.</li> <li>➤ Become effective teachers in order to perform desired role as commerce teacher.</li> <li>➤ Familiarize themselves with the type of audio visual aids, techniques and methods of teaching required for teaching of commerce.</li> <li>➤ Evaluate students performance and provide remedial teaching.</li> </ul>
Teaching of History	<p>To enable the pupil teachers to:-</p> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of History.</li> <li>➤ Develop teaching competencies related to History at secondary level.</li> <li>➤ Become effective teachers in order to perform desired role as a History teacher.</li> <li>➤ Familiarize themselves with the type of audio-visual aids and acquire the ability to develop and use them.</li> <li>➤ Familiarize themselves with the techniques and methods of teaching required for teaching of History.</li> <li>➤ Evaluate students performance.</li> </ul>
Teaching of Civics	<p>To enable the pupil teachers to:-</p> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of Civics.</li> <li>➤ Develop teaching competencies related to Civics at secondary level.</li> <li>➤ Become effective teachers in order to perform desired role as a Civics teacher.</li> <li>➤ Familiarize themselves with the type of audio-visual aids and acquire the ability to develop and use them.</li> <li>➤ Familiarize themselves with the techniques and methods of teaching required for teaching of Civics.</li> <li>➤ Evaluate students performance.</li> </ul>

Teaching of Geography	<p>To enable the pupil teachers to:-</p> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of Geography.</li> <li>➤ Develop teaching competencies related to Geography at secondary level.</li> <li>➤ Become effective teachers in order to perform desired role as a Geography teacher.</li> <li>➤ Familiarize themselves with the type of audio-visual aids and acquire the ability to develop and use them.</li> <li>➤ Familiarize themselves with the techniques and methods of teaching required for teaching of Geography.</li> <li>➤ Evaluate students performance.</li> </ul>
Teaching of Sanskrit	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ hone the skill of Lesson Planning at the Secondary level</li> <li>➤ understand and organize co-curricular activities for teaching of Sanskrit.</li> <li>➤ get acquainted with the methods of teaching Sanskrit.</li> <li>➤ develop the skills of preparing and using effectively the instructional materials for the teaching of Sanskrit.</li> <li>➤ get acquainted with Principles of preparing Curriculum for Sanskrit.</li> <li>➤ develop diagnostic and remedial measures through Evaluation in teaching Sanskrit.</li> </ul>
Teaching of Home Science	<p>To enable the pupil- teachers to:</p> <ul style="list-style-type: none"> <li>➤ develop understanding of the aim of teaching of Home Science.</li> <li>➤ develop understanding of the various methods and procedures required for teaching Home Science effectively.</li> <li>➤ develop basic skills and competencies required for teaching of Home Science.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ develop practical skills to organize various activities related to Home Science.</li> <li>➤ develop skills and competencies required for preparing teaching aids in teaching of Home Science.</li> <li>➤ develop competencies and skill for effective evaluation in Home Science.</li> </ul>
<b>3. Inclusive Education</b>	<p>To enable the pupil teachers to-</p> <ul style="list-style-type: none"> <li>➤ Realize the importance of inclusive education and inclusive education programmes and role of various agencies towards inclusion.</li> <li>➤ Know about the meaning and scope of special education</li> <li>➤ Understand the concept of exceptional children.</li> <li>➤ Grasp the meaning, specific characteristics and modalities of identification of some types of exceptional learners.</li> <li>➤ Understand various educational intervention programmes for meeting the needs of exceptional learners.</li> </ul>
<b>4. School Management &amp; Hygiene</b>	<p>To enable the pupil teachers to-</p> <ul style="list-style-type: none"> <li>➤ Get acquainted with the concept and concerns of School Management.</li> <li>➤ Scientific practices of educational management and keep him to apply it in work situation.</li> <li>➤ Develop an understanding of the role of the headmaster and the teacher in school management.</li> <li>➤ Understand the importance of good health and positive attitude towards exercise and health.</li> </ul>
<b>Optional Paper</b>	To enable the pupil teachers to:

<b>5(1). Teaching of Computer Education</b>	<ul style="list-style-type: none"> <li>➤ study and understand the resources for teaching Computer Science.</li> <li>➤ study and understand the skills in teaching of the computer skills to the students teachers for programming and Networking.</li> <li>➤ study and understand the skill in organizing extended curricular activities in Computer Science</li> <li>➤ study and understand the skill in preparing special programs for gifted and slow learners.</li> <li>➤ develop the skill in critical analysis of the text books and question papers of secondary school Computer Science.</li> </ul>
<b>5(2). Teaching of Environmental Education</b>	<p>To enable the pupil- teachers to:</p> <ul style="list-style-type: none"> <li>➤ understand the need of environmental Education.</li> <li>➤ develop a sense of Awareness about the environmental pollution and possible hazards and its causes and remedies.</li> <li>➤ know various ways and means to create healthy environment.</li> </ul>
<b>Practicum</b>	
<b>Professional Development</b>	<p>To enable the pupil teacher to:</p> <ul style="list-style-type: none"> <li>➤ To enhance self confidence, self esteem and improve overall personality.</li> <li>➤ To sensitize themselves about proper behaviour, socially and professionally in formal and informal situations.</li> <li>➤ To understand to contribute themselves as a responsible member and citizen of their local, national and international community.</li> <li>➤ To develop skills and techniques for effective communication and public speaking.</li> <li>➤ To acquaint ,groom, train and prepare themselves for job requirement.</li> <li>➤ To understand the importance of Aestheticism in human life.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ To develop interest in the Leisure time activities.</li> <li>➤ To understand the use of Drama as pedagogy.</li> <li>➤ To understand the use of Role Play technique in the teaching- learning process.</li> <li>➤ To understand to integrate singing method in teaching - learning process.</li> <li>➤ To understand the various Dance forms and then integrate in educational practices.</li> <li>➤ To use drawing, painting, sketches, cartoon making etc in teaching learning process.</li> <li>➤ To develop creativity through different creative Art &amp; Craft forms.</li> <li>➤ To understand the efficacy of different Art forms in education.</li> <li>➤ To understand the Well Being and Total Physical Fitness in one's life.</li> <li>➤ To understand &amp; develop the attitude towards Yoga practices for healthy life.</li> <li>➤ To understand &amp; develop attitude towards neutrality service to all sections of society irrespective of their categories for Disaster Management &amp; its Preparedness.</li> <li>➤ To understand and develop interest in gardening as a leisure time activity.</li> </ul>
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Semester - 3	
Title	Course Outcomes
Compulsory Papers	To enable the pupil- teachers to:

<b>1. Measurement and Evaluation in Education</b>	<ul style="list-style-type: none"> <li>➤ Comprehend the concept and purpose of measurement and evaluation</li> <li>➤ understand the various techniques and tools of evaluation.</li> <li>➤ know the various examination systems of India at different levels.</li> <li>➤ Compute and apply the statistical techniques in measurement and evaluation.</li> </ul>
<b>2. Theoretical Foundation of Curriculum</b>	<p>To enable the pupil- teachers to:</p> <ul style="list-style-type: none"> <li>➤ To enable the learners to understand the basic concept of curriculum, syllabus and textbooks.</li> <li>➤ To enable the learners to understand various types, methods, determinants and motives of curriculum development.</li> <li>➤ To enable the learners to understand various curriculum practices in India and abroad.</li> <li>➤ To enable the learners to design an innovative curricular model.</li> </ul>
<b>3. Guidance and Counselling</b>	<p>To enable the pupil- teachers to:</p> <ul style="list-style-type: none"> <li>➤ To understand the concept, need and meaning of guidance and counseling.</li> <li>➤ To get acquainted with the principles, various areas and procedure of guidance.</li> <li>➤ To develop understanding about the role of school in guidance.</li> <li>➤ To get acquainted with the principles and process of counseling.</li> <li>➤ To realize the qualities and role of a school counselor.</li> <li>➤ To acquire an idea about the need of counseling for children with special needs.</li> </ul>
<b>Field Work</b>	<ul style="list-style-type: none"> <li>➤ To enable the pupil- teachers to:</li> </ul>

Action Research	<ul style="list-style-type: none"> <li>➤ Define the concept of research and action research</li> <li>➤ Explain the steps of action research.</li> <li>➤ Describe in detail the dynamics of action research in educational contexts.</li> <li>➤ Demonstrate development and execution of action research project.</li> </ul>
<b>Professional Development</b>	<p>To enable the pupil teacher to:</p> <ul style="list-style-type: none"> <li>➤ To enhance self confidence, self esteem and improve overall personality.</li> <li>➤ To sensitize themselves about proper behaviour, socially and professionally in formal and informal situations.</li> <li>➤ To understand to contribute themselves as a responsible member and citizen of their local, national and international community.</li> <li>➤ To develop skills and techniques for effective communication and public speaking.</li> <li>➤ To acquaint ,groom, train and prepare themselves for job requirement.</li> <li>➤ To understand the importance of Aestheticism in human life.</li> <li>➤ To develop interest in the Leisure time activities.</li> <li>➤ To understand the use of Drama as pedagogy.</li> <li>➤ To understand the use of Role Play technique in the teaching- learning process.</li> <li>➤ To understand to integrate singing method in teaching - learning process.</li> <li>➤ To understand the various Dance forms and then integrate in educational practices.</li> <li>➤ To use drawing, painting, sketches, cartoon making etc in teaching learning process.</li> <li>➤ To develop creativity through different creative Art &amp; Craft forms.</li> <li>➤ To understand the efficacy of different Art forms in</li> </ul>



	<p>education.</p> <ul style="list-style-type: none"> <li>➤ To understand the Well Being and Total Physical Fitness in one's life.</li> <li>➤ To understand &amp; develop the attitude towards Yoga practices for healthy life.</li> <li>➤ To understand &amp; develop attitude towards neutrality service to all sections of society irrespective of their categories for Disaster Management &amp; its Preparedness.</li> <li>➤ To understand and develop interest in gardening as a leisure time activity.</li> </ul>
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<b>Semester - 4</b>	
<b>Title</b>	<b>Course Outcomes</b>
<b>Compulsory Paper</b>	<p>To enable the pupil teachers to:</p> <ul style="list-style-type: none"> <li>➤ know and understand the constitutional provisions in regard to the education</li> <li>➤ know and understand the basics/ fundamentals associated in the discipline of education and in a process to be a teacher from the Philosophical perspectives.</li> <li>➤ know and understand the socio cultural realities of the teacher , teaching and the teacher education program in context of the education from the sociological perspectives .</li> <li>➤ know and understand the various aspects related to the teacher education in the changing Contemporary society.</li> </ul>
<b>1. Contemporary India and Education</b>	
<b>Professional Development</b>	<p>To enable the pupil teacher to:</p> <ul style="list-style-type: none"> <li>➤ To enhance self confidence, self esteem and improve overall personality.</li> <li>➤ To sensitize themselves about proper behaviour, socially and professionally in formal and informal situations.</li> <li>➤ To understand to contribute themselves as a responsible member and citizen of their local, national and international</li> </ul>

	<p>community.</p> <ul style="list-style-type: none"> <li>➤ To develop skills and techniques for effective communication and public speaking.</li> <li>➤ To acquaint ,groom, train and prepare themselves for job requirement.</li> <li>➤ To understand the importance of Aestheticism in human life.</li> <li>➤ To develop interest in the Leisure time activities.</li> <li>➤ To understand the use of Drama as pedagogy.</li> <li>➤ To understand the use of Role Play technique in the teaching- learning process.</li> <li>➤ To understand to integrate singing method in teaching - learning process.</li> <li>➤ To understand the various Dance forms and then integrate in educational practices.</li> <li>➤ To use drawing, painting, sketches, cartoon making etc in teaching learning process.</li> <li>➤ To develop creativity through different creative Art &amp; Craft forms.</li> <li>➤ To understand the efficacy of different Art forms in education.</li> <li>➤ To understand the Well Being and Total Physical Fitness in one's life.</li> <li>➤ To understand &amp; develop the attitude towards Yoga practices for healthy life.</li> <li>➤ To understand &amp; develop attitude towards neutrality service to all sections of society irrespective of their categories for Disaster Management &amp; its Preparedness.</li> <li>➤ To understand and develop interest in gardening as a leisure time activity.</li> </ul>
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### **Learning Outcomes (LO)**

- Empowered in content and pedagogy of teaching subjects.
- Develop teaching competency and communication skills through internship programme.
- Understand the teaching as a profession and understanding of various approaches of teaching.
- Develop an awareness in the student-teacher about population and environment.
- To develop competency to solve the educational problems through action research.
- Understand the concept of knowledge and relationship between Philosophy and Education.
- Understand the role of education in promoting national & international values.
- Understand the psychology of learners and theories of learning & motivation.
- Understand the characteristic features, strengths and weaknesses of ancient, medieval, British and contemporary system of education in India.
- Understand the administration of education at different levels and also understand the role of Headmaster in school management.