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Faculty of Arts

B.A. (Bachelor of Arts)

Program Outcomes

- ✓ The B.A. programme in the college is recognized by Barkatullah University and follows the syllabus prescribed by the university.
- ✓ Some learning outcomes include: Cognitive skills: Students choosing combination of three subjects develop social, political, historic, economic and literary consciousness and will be better able to appreciate different civilizations, culture.
- ✓ In the three-year duration, they will cultivate the sensibility to discern the evolution of civilizations and cultures.
- ✓ They will also be up to date with contemporary developments and develop a sociological sensibility to critically understand the social phenomena that affects their lives. Students also learn two languages along with three major subjects.
- ✓ At the end of the programme, they usually will have advanced reading, writing, speaking, interpretive and composition skills in both languages.
- ✓ Employability: On graduating, the students will be eligible for employment in tourism, music, dance, fine arts, and social work. Students also become employable in non-governmental organizations.
- ✓ Their skills in comprehension of general social phenomena around them places them in ideal situation for such jobs. They will also be able to appear for competitive examinations conducted for public sector jobs.
- ✓ The general humanities education equips them to clear competitive exams. Values: Humanities education is designed in such a way that it lays particular emphasis on human values. Students on completion of the undergraduate degree will be better able to appreciate the literary and cultural diversity.
- ✓ It equips them to think critically about the issues of contemporary relevance and hold an informed opinion on them.



B.A. Dance

COURSE OUTCOMES

YEAR I

PAPER I : (Major) History of Kathak Dance	<ul style="list-style-type: none"> ➤ Primary Knowledge of Theory. ➤ Primary Knowledge About Music-Vocal, Instrument & Dance ➤ Development of Primary Level Teaching Ability. ➤ Development of Physical & Mental Strength.
PRACTICAL-I Nrityanjali	<ul style="list-style-type: none"> ➤ Knowledge of Footwork ➤ Knowledge of Hand Movements. ➤ Knowledge of Bhramari. ➤ Primary Dance in Teentaal. ➤ Primary Dance in Jhaptal. ➤ Knowledge of Gatnikas.
PAPER: II (Major Minor Elective) Technique of Dance	<ul style="list-style-type: none"> ➤ Theoretical Knowledge of Body Movement ➤ Knowledge of Various Contents of Taal. ➤ Knowledge about Content of Kathak Dance ➤ Knowledge of Taallipi Method.
PRACTICAL-II Bhavanjali	<ul style="list-style-type: none"> ➤ Development of skills to perform Folk Dance. ➤ Development of skills to perform Vandana on Sanskrit shloks, ➤ Knowledge of Asanyukth Hastas & Greeva Bheda to perform. ➤ Knowledge of Padhant & Notation. ➤ Knowledge of perform semi classical dance.



B. A. DRAWING AND PAINTING Program Specific Outcomes

In under graduation level this course is designed in such a way that the students get a step-by-step gradual knowledge of the subject practically and theoretically both. The course is divided into two parts one theory and the other is practical (two practical papers) each year. In three years, students are given all the knowledge of the subject starting from basic (elementary) to the detailed intrication of creativity and imagination. By the time student completes under graduation she becomes substantially independent to create her own unique style of painting successfully which helps her to earn too.

COURSE OUTCOMES

YEAR I

PAPER I : MAJOR HISTORY OF ARTS

- Students will recognize and understand major monuments, artists, methods and theories, and be able to assess the qualities of works of art in their historical and cultural settings.
- How the then social problems should become subjects of Art.

PAPER: II Major Minor, Elective Fundamental Of Art

- Students get information about Principle of art. The art language is based on concepts called the "ELEMENTS and PRINCIPLES of Art". Introduction to the basic elements of art, 6 Elements of Art: Line Shape Color Texture Value.

PRACTICAL-I STILL LIFE

Through this paper students are made to draw and paint a few objects composed on a table in front of them with the drapery hanged in the back and underneath the objects. Through this practical they learn-

- To draw different forms and shapes.
- Perspective
- Effects of light and shades
- Practical study of textures
- Coloring in transparent and opaque style in short, they learn realistic approach of drawing and painting.

PRACTICAL-II DESIGN

Here the students learn to convert realistic forms into creative or decorative forms They learn step by step,

- To use their imagination creatively.
- To use all those realistic forms (learned in the previous year) into decorative forms.
- To use all those forms collectively in a given subject for example - 'saree border', 'carpet', 'lampshade' purse etc.
- To develop an understanding for color combinations through different experiments



YEAR II

PAPER I :HISTORY OF INDIAN PAINTING	An art student must know the gradual growth and development of their subject historically . This paper gives them the knowledge of Indian art scenario from prehistoric period till modern times and different styles developed in different political, social, economical and historical environments in this long span of time.
PRACTICAL I : COMPOSITION	<p>This paper gives the students a thorough knowledge of space and its divisions with the use of human figures, animals, nature, birds and sceneries in background and foreground.</p> <p>Students learn to make human figures in different poses (single and groups)</p> <ul style="list-style-type: none"> ➤ They learn human figures, their anatomy & proportions of the body ➤ They learn to compose a given subject in a small given space in limited colours.
PRACTICAL II : PORTRAIT	<p>This paper is divided into two parts- (1) head drawing from antiques (2) head drawing and painting from life model.</p> <ul style="list-style-type: none"> ➤ This enables the student to understand the features of human faces and their expressions in detail and also to paint them with exact resemblance. ➤ The effect of light and shade falling on the face of the sculpture in front and painting it accordingly in mono colour.

YEAR III

PAPER I : THE HISTORY OF INDIAN SCULPTURE	India is very rich in the art of sculpture as well as in painting. As the students are given knowledge of history of Indian painting in the precious year, likewise this year they come to know about History of Sculpture in India.
PRACTICAL I : COMPOSITION	<p>This year the size of the ground area of painting is enhanced, so that the students learn to manage figures in bigger sizes with foreground and background, according to the given subject in multi colours.</p> <ul style="list-style-type: none"> ➤ They learnt to face the challenges of composition ➤ Students play with the colours through many practices (of different colour schemes). ➤ They learn to work in different medium and thus master painting in mixed media.
PRACTICAL II : PORTRAIT	This year, the picture frame is the same but the student is expected to paint the face of the model with atmost details, so that the exact expressions can be attained through play of colours and light-shade falling on the face . This year, they use all the colours instead of monochrome.



B.A. (Economics) Program Specific Outcomes-

COURSE OUTCOMES

I YEAR

PAPER I: MICRO ECONOMICS **Major**

After completing this course, students will be able to understand rational behavior and fundamentals of microeconomics-

- They will be able to explain consumer's and producer behavior and their optimum decisions.
- Students will be able to know about the firms and industry, markets and their decisions about optimum production. They will also be able to explain the theory of distribution and concept of economic welfare.
- Learning microeconomics is an excellent way to gain an understanding of many factors that affect us in the real world, such as methods of buying goods, product pricing and input pricing. Ultimately, learning microeconomics is key in learning about the principles of economics.

PAPER: II **INDIAN ECONOMY** **Major, Minor, Elective**

After completing this course, students will be able to sharpen the analytical skills by highlighting a broad overview of the Indian economy.

- They will be familiar with the issues related to Agriculture, Industry, Foreign Trade, Economic Planning and various Economic Problems of India. Students will be acquainted with a broad overview of Madhya Pradesh Economy.
- They will be able to develop, analyse and interpret events and issues related to the Indian Economy

II YEAR

PAPER I: **MACRO ECONOMICS**

- This will provide well resourced learning environment for students.
- Student will understand the wide potential of the subject economics and its implementation in day to day life as well as sustainable development.

PAPER II : PUBLIC **FINANCE &** **INTERNATIONAL** **ECONOMICS**

- Public economics is the study of government policies from the point of view of economic efficiency and equality.
- The paper deals with the nature of govt. interventions and its implications for allocation and stabilization.



YEAR-III

PAPER I: DEVELOPMENT & ENVIRONMENTAL ECONOMICS

- Students will be able to understand the meaning of development and the development model in the context of India.
- Students will be able to understand modern model of development and the combine concept of environment and development.

PAPER II: STATISTICS

- Student will be able to understand basic theoretical and applied principals of statistics needed to enter the job force.
- Students will be able to communicate key statistical concept to non-statistical student will gain proficiency using statistics.



B.A. (ENGLISH) Program Specific Outcomes-

The department of English SNGGPG College Bhopal offers an undergraduate course in English literature. The bachelor of arts English literature is a carefully designed 3 year course which enlightens about diverse nuances of English literature including plays , novels , prose and poetry

The UG Course is planned -

- To introduce students with usefulness of English language through the study of English literature.
- To help students in the development of critical and analytical thinking through literary texts from different historical periods and genres.
- To provide students a platform to understand interrelatedness between life and literature and engage them in a lifelong learning.
- To promote career dexterity in the students.

COURSE OUTCOMES

YEAR-I

PAPER I – MAJOR STUDY OF DRAMA

The course will inculcate team work , communicative ability , creativity and aesthetic sense in students enabling them to understand in detail drama and the theatre. Through this course the students will acquire the knowledge of

- Different genres of drama like comedy , tragedy , epic theatre and commedia dell'art
- Distinctive features of Sanskrit , Greek , English , American and Indian plays
- Dramatic techniques and elements like plot , theme , character , spectacle and narrative

PRACTICAL I APPLIED DRAMA

The course will inculcate team work, communicative ability, creativity and aesthetic sense in students enabling them to understand in detail drama and the theatre. Through this course the students will acquire the knowledge of -

- Different genres of drama like comedy , tragedy, epic theatre and commedia dell'art
- Distinctive features of Sanskrit, Greek, English, American and Indian plays
- Dramatic techniques and elements like plot, theme, character, spectacle and narrative



Paper II MAJOR, MINOR, ELECTIVE Study of Poetry	<p>The Study of Poetry will not only instruct and delight the students but also inspire them to have positivity creativity and a new way of thinking. After the study of this paper the students will be able -</p> <ul style="list-style-type: none"> ➤ To identify , interpret , analyze and appreciate the various elements of poetry ➤ To develop literary intellect and ➤ To appreciate the lyrical and sonorous quality of language
Practical II Applied poetry Major, Minor, Elective	<p>The Study of Poetry will not only instruct and delight the students but also inspire them to have positivity , creativity and a new way of thinking. After the study of this paper the students will be able -</p> <ul style="list-style-type: none"> ➤ To identify , interpret , analyze , and appreciate the various elements of poetry ➤ To develop literary intellect and ➤ To appreciate the lyrical and sonorous quality of language and create poetry ➤ The course is beneficial for learners in understanding the mechanism of literature in a creative manner. This course will – ➤ Accelerate the confidence of students for extempore English and surge their knowledge ; and ➤ Promote the analytical and arguing capacity of students.
YEAR-II	
PAPER I - DRAMA	<ul style="list-style-type: none"> ➤ Students will become drama and its different forms. ➤ Become acquainted with the development of drama through ages. ➤ Students will be able to interpret and analyse drama with respect to plot and characters. ➤ Will become familiar with the dramatical techniques. ➤ Students will be able to describe, analyse , interpret and evaluate dramatic literature theatrical productions.
PAPER II - FICTION	<ul style="list-style-type: none"> ➤ Students will be able to recognize the elements of fiction. ➤ Students will become familiar with historical background of fiction through ages. ➤ Students will learn to interpret texts with an awareness and curiosity of



other viewpoints.

- Students will be acquainted with religions, political and social movements across the ages.

YEAR-III

PAPER I – POETRY

- Students will be able to get familiar with the trends that are associated with the era.
- Students will be able to interpret and analyse modern poetry.
- Appreciate the masterpieces of literature written in an era.
- Develop and practice their interpretative skills and textual analysis in reading poetry.
- Become familiar with the major theoretical and critical terms related to poetry of a period.

PAPER II - FICTION

- Acquainted with the major issues related to the cultural and social contexts with respect to 20th century fiction.
- Students will be able to read texts closely and analyse a piece of fiction from the perspective of plot, themes and characters.
- Students will be able to read fiction with graduate level interpretative analytical proficiency.
- Students will be able to appreciate fiction and its ability to stimulate feelings in the reader



B.A. (Geography) Program Specific Outcomes-

COURSE OUTCOMES

YEAR-I

PAPER I Human Geography ; Environment and Culture (Major)	<p>After the completion of course, the students will be able to:</p> <ul style="list-style-type: none"> ➤ Discuss and describe the major concepts and key principles of Human Geography including place, space, scale and landscape. ➤ Appreciate the diversity of the cultural backgrounds and places. ➤ Approach problem solving from a geographic perspective by understanding the role location plays.
Practical I General Cartography	<p>After the completion of course, the students will be able to:</p> <ul style="list-style-type: none"> ➤ Learn the principles of Map Design, Map Reading and Construction of Scale. ➤ Create professional and aesthetically pleasing maps through thoughtful application of Cartographic Conventions. ➤ Comprehend the principles and types of Surveying and learn the Chain and Tape survey.
Paper-2 : Physical Geography- Lithosphere (Geomorphology) (Major, Minor, Elective)	<p>After the completion of course, the students will be able to:</p> <ul style="list-style-type: none"> ➤ Understand the internal structure of the earth, rocks that compose it and forces within the earth that act to deform it. ➤ Analyze how the natural and anthropogenic operating factors affect the development of land forms. ➤ Understand about the denudation processes that unceasingly act at the earth's surface to shape land forms and reduce relief. ➤ Assess the role of structure, stage and time in shaping the land forms.



Practical Paper – 2 : General Cartographic Techniques Cartography	<p>After the completion of course, the students will be able to:</p> <ul style="list-style-type: none"> ➤ Learn the principles of Map Design, Map Reading and Construction of Scale. ➤ Create professional and aesthetically pleasing maps through thoughtful application of Cartographic Conventions. ➤ Comprehend the principles and types of Surveying and learn the Chain and Tape survey.
YEAR-II	
PAPER I CLIMATOLOGY AND OCEANOGRAPHY	<p>After completion of this course the students will be able to :</p> <ul style="list-style-type: none"> ➤ Comprehend the individual elements and controls of climate, their distribution pattern and interrelation. ➤ Gain in depth knowledge of upper atmospheric condition and cyclonic features. ➤ Understand the concept of climatic regions, types and groups deriving from a synthesis of climatic elements. ➤ Get detailed exposure to the elements of ocean and ocean bottoms. ➤ Understand the oceanic processes and oceanic environment.
PAPER II ECONOMIC GEOGRAPHY	<p>After completion of this course the students will be able to :</p> <ul style="list-style-type: none"> ➤ Establish and analyze the spatial pattern of economic development. ➤ Explain the role of historical, environmental, cultural and other factors and determining economic activities. ➤ Comprehend and distinguish the different type of economic activities and processes which transform economy from primary to tertiary stage.
YEAR-III	
PAPER I GEOGRAPHY OF INDIA	<p>After completion of this course the students will be able to :</p> <ul style="list-style-type: none"> ➤ Acquaint with the physical and human characteristics of India. ➤ Analyze the natural resource based of India. ➤ Examine the factors responsible for location and distribution of economic activities in India. ➤ Comprehend the basis of regionalization and regions of India.



**PAPER II
ENVIRONMENT AND
RESOURCE
MANAGEMENT**

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

- Get in-depth knowledge of man environment relationship.
- Analyze the use, reuse and misuse of resources and their consequences.
- Comprehend measures of conservation and management of resources.
- Understand the environmental programmes and policies at local as well as global level.



B.A. Hindi Program Specific Outcomes

पाठ्यक्रम का अध्ययन करने के उपरांत छात्राएं निम्नांकित लाभ प्राप्त कर सकती हैं:-

- उत्कृष्ट साहित्यिक पाठों के अध्ययन से रूचि का विकास करना।
- सांस्कृतिक चेतना और राष्ट्रीय भावना का विकास करना।
- भाषा-ज्ञान
- सामान्य शब्दावली और विशेष शब्दावली के अध्ययन द्वारा भाषा एवं संस्कृति बोध का विकास करना।
- विशिष्ट शब्दावली (बीज शब्द/की वर्ड) से परिचित करवाते हुए बोध के स्तर को विकसित करना।
- प्रतियोगी परीक्षाओं हेतु तैयार करना

COURSE OUTCOMES

YEAR-I

प्रथम प्रश्न पत्र

हिन्दी काव्य

- इस पाठ्यक्रम के अध्ययन से विद्यार्थी हिन्दी काव्य की सुदीर्घ परम्परा से परिचित होंगे
- प्रसिद्ध रचनाओं के अध्ययन से देश की सामाजिक, सांस्कृतिक एवं राष्ट्रीय पृष्ठभूमि से सुविज्ञ होंगे।
- विद्यार्थियों के व्यक्तित्व का विकास होगा, उनकी जीवन दृष्टि का विस्तार होगा, जिससे वह जीवन एवं जीवन मूल्यों को समझने में सक्षम होगा।
- रचनात्मक कौशल से दक्षता होगी, जिससे उन्हें रोजगार की अनेक संभावनाएं मिलेंगी।

द्वितीय प्रश्न पत्र कार्यालयीन हिन्दी का स्वरूप, उद्देश्य एवं क्षेत्र (मुख्य, गौण, वैकल्पिक)

- इस पाठ्यक्रम के माध्यम से विद्यार्थी कार्यालय के कार्यों की मूलभूत जानकारी एवं कार्यशैली सीख सकेंगे, जिससे वे कार्यालयीन कार्य करने में सक्षम होंगे।
- नई तकनीक के माध्यम से ज्ञान विज्ञान के क्षेत्र में विशेषज्ञता प्राप्त कर सकेंगे।
- भाषा कम्प्यूटिंग में दक्षता होगी एवं रोजगार प्राप्ति के अवसर मिलेंगे।

YEAR-II

प्रथम प्रश्न पत्र

हिन्दी भाषा और नैतिक मूल्य

- छात्राओं को हिन्दी भाषा, वर्ण, स्वर, व्यंजन, उनका वर्गीकरण, उच्चारण स्थान की जानकारी प्रदान करना।
- छात्राओं में निबंध, कहानी एवं यात्रा वृत्त लेखन के प्रति रूचि जाग्रत करना।
- विराम चिह्नों का प्रयोग करना



- वैज्ञानिक लेखों के प्रति छात्राओं की रुचि बढ़ाना।
- स्वामी विवेकानन्द, महर्षि अरविन्द, महात्मा गाँधी, रविन्द्रनाथ टैगोर जैसे महापुरुषों के जीवन वृत्तांत एवं नैतिक मूल्यों को जानने के लिए प्रेरित करना।

YEAR-III

प्रश्न पत्र हिन्दी भाषा और नैतिक मूल्य

इस पाठ्यक्रम के अध्ययन करने के उपरांत छात्राएं निम्नांकित लाभ प्राप्त कर सकती हैं:-

- छात्राओं को मध्यप्रदेश की लोककलाओं से परिचित कराना तथा हिन्दी की लोकोक्तियों एवं मुहावरों से छात्राओं का ज्ञानवर्द्धन करना।
- मीडिया को लोकतंत्र का चौथा स्तंभ कहा जाता है इसी के चलते इसके महत्व का अंदाजा लगाया जा सकता है।
- छात्राएं प्रिंट मीडिया व इलेक्ट्रॉनिक मीडिया संबंधी जानकारी प्राप्त कर पत्रकारिता के क्षेत्र में अग्रसर हो सकती हैं।
- अनुवाद प्रक्रिया का उपयोग सिखाना।
- विश्व के विभिन्न धर्मों की जानकारी देना तथा महात्मा गाँधी (सत्य के प्रयोग) पढ़ने के लिए प्रेरित करना।



B.A. (History) Program Specific Outcomes

COURSE OUTCOMES

YEAR-I

PAPER I: Idea of Bharat Major	<ul style="list-style-type: none"> ➤ Students will acquire knowledge regarding the primitive life and cultural status of the people of ancient India. ➤ They can gather knowledge about the society, culture, religion and political history of ancient India. ➤ They will also acquire the knowledge of changing socio-cultural scenarios of India. ➤ By studying this paper, students will get to know the golden past of India and feel proud of them.
PAPER II: History of Ancient India (From early to 1205 A) Major, Minor, Elective	<ul style="list-style-type: none"> ➤ The students will learn to analyze the various stages of evolution and development of man in the prehistoric, Protohistoric and Historic Age. ➤ To have an in depth knowledge about the ancient civilizations of India like Indus-Saraswati Civilization, Vedic civilization, Later Vedic Civilization etc. and compare them with the other contemporary civilizations of the world. ➤ To explain in detail about golden past of India during the Mauryan and Gupta period, their conquests, art, architecture and literature, etc. ➤ They will able to write meaningful essays on the brave and courageous rajput clans and the South Indian dynasties of India.

YEAR-II

PAPER I: MEDIEVAL HISTORY	<ul style="list-style-type: none"> ➤ Students will be able to understand the political and Arabian and Turks Dynasties establishing. ➤ Students will be able to understand the composite culture of Hindus and Muslims. ➤ The students will be able to know the sculptures and monuments built during medieval period. ➤ Students will be able to know the cultural renaissance during Bhakti movements in sultanate period and growth of human values
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**PAPER II:
(I & II YEAR)
WORLD
HISTORY**

The students will be able to understand the events took place in Europe and other continents regarding political, emperialism, liberalism and world war. This will enhance How the world runs and rules.

- To know the human rights and how foreign revolutions declared human rights first time in 18th century.
- The students will be able to know the importance of republic by studying the struggle for freedom of America.
- The importance and success of parliamentary organization of Great Britain.

YEAR-III

**PAPER I: The
Goals Of
Studying Of
History Of
Modern India**

- The students will be able to know the political, cultural and economical effects due to colonialism of England in India.
- Students will be able to understand the freedom movements and sacrifices of revolutionaries to get freedom of India.
- Students will be able to know constitutional development as a Nation of India.
- Students will be able to understand the contribution of princely states and freedom fighters



B.A. (Music Vocal) Program Specific Outcomes

YEAR- I

PAPER I:

History of Indian Music Major

- The course aims to acquaint the students with the Hindustani Music System.
- The Meaning of the initial technical words of music and to acquaint the student with Ragas and Talas.
- What is notation System? It aims to introduce the students with the inventor of notation and his musical contribution.
- Student will come to know about the employment opportunities in the field of music.

PAPER II:

Multi Dimension Of Hindustani Music

Major, Minor, Elective

- ❖ Introduction of types of Indian Music:-
 - a) folk Music
 - b) Semi Classical Music
 - c) Light Music
- Reporting of Akashvani, Doordarshan and Music Festival of Madhya Pradesh.
- Introduction of Life sketch of Film Playback Singers of Madhya Pradesh and their contribution in Music.
- Harmonium which is used in Indian Music, its complete description.

YEAR- II

- ❖ The 'Raags' of advance level are taught and are given the technical details about them so that they can enhance their knowledge.
- ❖ The transcripts of different style is gives them overall knowledge of presenting music in different way.
- ❖ The minute details of supporting instruments like 'Tanpure' and 'Table' are provided to them which every musician should know. The knowledge of 'Taals' gives them perfection in singing.
- ❖ Again the work of reknowned historical music enhance their knowledge of music and motivate them.

YEAR- III

- ❖ The technical details of sound and acoustics given to students makes their performances more towards perfection.
- ❖ The knowledge of Indian classical and Karnataka styles of music is given which puts students a more higher levels of music.
- ❖ To prepare students for a overall musician category and to make their personality development to more perfect level, knowledge about very reknow historic personalities of Indian classical music is given.
- ❖ By learning about this course a student become a complete musician and it adds to their overall personality and they are enabled to generate their own employment.



B.A. (Music -SITAR) Program Specific Outcomes

COURSE OUTCOMES

YEAR- I

PAPER I: Principles of Indian Music – 1 Major

- ❖ After completion of course student can opt it as means of living.
- ❖ Can be very useful for students with disabilities.
- ❖ The student can understand the importance of Indian music.

PAPER II: Principles of Indian Music – 2 Major, Minor, Elective

- ❖ In this course the students can know the relation of sound and music.
- ❖ Can know the History of Indian music.
- ❖ Can understand the importance of ‘ Laya’ and a’Taal’
- ❖ You can know what aspects of music are related to life.

YEAR- II

- ❖ In this class students are taught tougher Ragas on other aspects of instrumental music.
- ❖ They are guided to apply technicalities of instrument and to the if they are critically analysed to prepare them for public performances.
- ❖ A student gets ready for it by learning the fine basics of Raag and Taal.
- ❖ A student learn the importance of practice (Riyaz) and are assessed critically

YEAR- III

- ❖ In this class a student learns more new and tough Raags and is well prepared for demonstration her skills in public.
- ❖ She can rate her performance on different parameters, analyse it and utilize the suggestions given by experts to improve upon.
- ❖ They are taught different styles of playing instrument like masket khani & Rajakhani get. They get acquainted with differentiation of instrument.
- ❖ By knowing about leading musicians their knowledge is enhanced.



B.A. (Political Science) Program Specific Outcomes

- ❖ Students will gain an in depth holistic knowledge of the subject.
- ❖ They will be able to understand the political affairs at regional, national and international levels.
- ❖ Students will be groomed for undertaking advance research and register for a Ph.D. degree.
- ❖ A base would be prepared for those who want to take competitive exams.
- ❖ There are ample opportunities in the field of academics at school and higher education levels.
- ❖ Students can get job opportunities in the field of journalism, administrative services, NGOs and voluntary organizations, international organizations, embassies and consulates.
- ❖ After gaining knowledge of constitution and regional, state and national politics, students can participate better in active politics consequently holding different political posts at various levels of the nation.
- ❖ The expected outcome of the course is to equip students with the concepts, principles, theories and processes studied in Political Science, so as to facilitate their career choices and employment. The course is aimed at shaping the students' perception and outlook on social, economic and political environment of India and beyond. The course also seeks to develop the analytical abilities, observational skills and decision making faculties of the students so that they will be able to face different challenges of life.

COURSE OUTCOMES

YEAR- I

PAPER I:- POLITICAL THEORY MAJOR

- Students will be able to understand the meaning and significance of political theory, different ideology and approaches
- They will be able to explain the concept and state and its changing nature.
- They will be learn what is power and authority and how they are interwoven. These two concepts will further and enhance their understanding of politics.
- They will be able to learn different dimensions of sovereignty and its relations with state.
- They will be able to explain liberty, equality, justice, and rights. Understanding of these key political concepts will facilitate student in real political world.



PAPER II- INDIAN CONSTITUTION N MAJOR, MINOR, ELECTIVE	<ul style="list-style-type: none"> ➤ Students will be able to understand the constitutional development in India. ➤ They will be able to answer how constituent assembly was formed, ➤ They will be able to describe the significance of Preamble, Fundamental Rights and Directive Principles of state policy in the constitutional design of India. ➤ They will be able to answer questions pertaining to the function and role of the President, Prime Minister, Governor, Chief Minister, Parliament and state Legislator and the courts in the constitutional Design of India.
YEAR-II	
PAPER I- Representative Political Thinkers	<ul style="list-style-type: none"> ➤ Acquiring an insight into the fundamentals of Ancient Indian Political Thought and appreciating the richness of the thought and Philosophy of Manu, Kautilya and Buddhist tradition. ➤ Developing an in-depth knowledge about the dominant features of Ancient Western Political Thought in general and Ancient Greek political thought in particular with focus on Plato and Aristotle. ➤ Understanding the specific features of Modern Political Thought and getting an insight into the thought of thinkers like Machiavelli, the Social Contractarians- Hobbes, Locke, Rousseau and Utilitarian- Jeremy Bentham. ➤ Comprehending the views of Western and Indian communist thinkers. ➤ Acquiring knowledge about modern Indian Political Thought and the unique views of its propounders like Gandhi, Ambedkar, Lohiya and Deendayal Upadhyay. ➤ Appreciating the diversity and richness of Political Thought in a comparative perspective. A study of different theories and concepts enables a comparison with the contemporary social, economic and political realities and their relevance in present times.
PAPER II- CONSTITUTIONS OF MAJOR COUNTRIES:	<ul style="list-style-type: none"> ➤ Getting introduced to the basics of the ideas of constitution and constitutionalism and its diverse application. Student's interest is generated in the global arena. ➤ Understanding the evolution of parliamentary democracy and its institutions by studying the constitution of Britain by learning about British political system and the British political traditions. ➤ Acquiring knowledge about the constitution of United State of America, the originator of the Presidential form of government and modern Federal system, Presidential form. Student shall understand the uniqueness of the system of checks and balances.



- Getting an insight into two very different systems and their constitutions- Switzerland with its direct democracy and China with an authoritarian system.
- Enable students to develop critical thinking, intercultural sensitivity and appreciate specific features of four diverse countries and develop a broad international perspective.

YEAR-III

PAPER I- INDIAN FOREIGN POLICY :

- Developing an understanding the fundamental features and determinants of Indian foreign policy and the implications of diplomatic moves made by the states.
- Knowledge about the areas of cooperation and also the background of many disputes that continue to fester India's relation with its neighbouring countries.
- Getting an insight into the relations with the super powers over a period of time and develop a critical understanding of its status under the existing dispensation.
- Understanding the pursuit of national interest and international commitments through its foreign policy and India's role in regional organizations in this field.
- Develop a critical perspective on contemporary international issues and their implication for India.

PAPER II- PUBLIC ADMINISTRAT ION :

- Understanding and acquiring an overview of the Public Administration and how it is different from Private Administration.
- Being introduced to the changing contours of the discipline and various principles of organization.
- Attain knowledge about types and methods of recruitment, training and promotion in public administration and about the recruiting body.
- Learning about the process of making the budget and the importance of accounting and auditing.
- Student will be able to understand development administration and local self-government institutions.



B.A. PSYCHOLOGY

COURSE OUTCOMES

YEAR-I

PAPER 1: Personality Development Major	<ul style="list-style-type: none"> ➤ Students will gain knowledge of personality ➤ Students will learn to implement coping strategies for better adjustment. ➤ Students will develop skills to enhance self esteem self regulation and self presentation ➤ Students will learn the skills of SWOC, communication, time and stress management for their life ➤ Acquisition of life skills based on happiness and positive thinking
Practical I Report Presentation	<p>On Completion of this course, learners will be able to :</p> <ul style="list-style-type: none"> ➤ Students will learn to evaluate their strength, weakness, opportunities and challenges ➤ Students will develop skills to enhance their personality through applications of communication skills, time and stress management.
Paper II Introduction to Psychology Major, Minor, Elective	<ul style="list-style-type: none"> ➤ To develop knowledge and skill in life through learning principles ➤ Learn to apply techniques of memory improvement in everyday life ➤ Learn to gain self regulations for quality of life ➤ Acquisition of life skills through motivation
Practical II Practical Work	<p>On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> ➤ Student will learn to apply practical application of psychological concepts of attention, learning and emotion. ➤ Student will develop the skill of memory improvement and ability to enhance their personality through applications of communication skills, time and stress management. ➤ Student will acquire the knowledge of achievement motivation in their life ➤ Student will learn to evaluate SWOC



YEAR-II

PAPER 1:

DEVELOPMENTAL PSYCHOLOGY

After the completion of this course students will be able:

- To understand the process, stages and principles of human development.
- To grasp the extent of influence of hereditary and environmental factors on development process.
- To obtain the knowledge of differences among growth, development and maturation.
- To understand and appreciate the biological, emotional, physical, cognitive, social, and moral changes during babyhood, childhood, adolescence, adulthood and old age.
- To acquire knowledge of problems of adolescence and old age.

PAPER II

COUNSELING PSYCHOLOGY

After completion of this course students will be able:

- To understand concept of psychological guidance and counseling, its importance and need at every stage of life.
- To develop understanding for oneself and others with the knowledge of self concept and self esteem.
- To learn various approaches and techniques of counseling used in helping educational, vocational, personal and social problems.
- To acquire specific coping skills for problems solving, crisis management, decision making and relationship improvement.
- To develop positive attitude, sensitivity and empathy for understanding persons with special abilities.
- To imbibe knowledge about qualities of counselor, counseling skills and techniques for special groups; like, elderly people, alcoholics, drug abuse cases and mental retarded individuals.
- To gain knowledge of group counseling techniques applicable to family, parents, delinquents, pre-marital and marital counseling for betterment of society.



YEAR--III

PAPER 1:

SOCIAL PSYCHOLOGY

After the completion of this course students will be able:

- To understand various methods applied in the field of social psychology.
- To gain knowledge of interrelation between social psychology and other social sciences.
- To interpret perception of other people and attribution process.
- To develop an insight into formation of attitudes, prejudice, discrimination and process of change/ reduction.
- To demonstrate group formation, group cohesiveness and effect of group on individual's behavior.
- To acquaint with various social problems and understand applications of social psychology

PAPER II

RESEARCH METHODS AND STATISTICS.

After the completion of this course students will be able:

- To understand the basic steps of research.
- to demonstrate the ability to select appropriate methods suitable to research aims and objectives .
- To construct tools for measuring psychological attributes.
- To develop skills in qualitative and quantitative data analysis and its presentation.
- To gain knowledge and demonstrate research report writing skill.



B.A. (PHILOSOPHY) PROGRAM SPECIFIC OUTCOMES

1. After completing of B.A. Philosophy course, the students will be able to understand and discuss major philosophical problems in the Indian as well as western tradition. They also will be able to assess arguments and philosophical perspectives using critical reasoning and can also express complex thoughts logically & coherently.
2. By studying classical texts and contemporary problems, B.A. Philosophy students learn how to construct powerful arguments while pondering over some of the deepest questions in human life.
 - What makes for a meaningful life?
 - Do humans have freewill?
 - What is the nature of consciousness and can it be explained?
3. Students in the B.A. Philosophy course will be able to learn how to explore answers to these fundamental questions by debating and defending complex ideas & arguments and express their beliefs with clarity and precision. After completing this course students can also live a thoughtful and productive life.

COURSE OUTCOMES

YEAR-I

PAPER I- Yoga Philosophy Major

As a result of meeting the requirements in this course, students will be able to :-

- From the time immemorial yoga philosophy has established its significance. In present Scenario, yoga has become need of hour and proved its relevance.
- Through yoga education, students will be able to know about their ancient traditions.
- Students will be aware that how ancestors live health, happy and longer life.
- Through study of yoga student will become aware about their health and personality development, along with they will know how to enter in spiritual realm too.
- Through yogic practices students will prepare themselves for their future livelihoods. For example students will able to get appointment as physical trainer in yogic and fitness centers.
- At the time of present pandemic situation Yoga students will be helpful to improve the mental and physical condition of patients.



<p>PAPER II</p> <p>An Introduction to Ethics</p> <p>Major, Minor, Elective</p>	<p>After studying this course, students will be able to :-</p> <ul style="list-style-type: none"> ➤ After completion of the study of Ethics the student will become more conscientious about his actions and behavior. ➤ He will acquire knowledge of implementing ethical solutions in making policies at his workspace. ➤ He will know about ethical thinkers and Philosophers which will broaden his horizon. ➤ Demonstrate ethical awareness and ability to do ethical reflection. ➤ Use specific capacities and skills to make moral decisions.
YEAR- II	
<p>PAPER I-</p> <p>INDIAN PHILOSOPHY</p>	<p>The outcome of this course is to :-</p> <ul style="list-style-type: none"> ➤ Learn various treatise on Indian Philosophy and enquiries in to the different tools which led the foundation of Indian philosophy. ➤ Get the detailed study of Indian knowledge system. ➤ Understand the distinct features of Indian epistemology and metaphysics.
<p>PAPER II-</p> <p>WESTERN PHILOSOPHY:</p>	<p>The outcome of this course is to :-</p> <ul style="list-style-type: none"> ➤ Give an in-depth knowledge of western philosophy and thinkers. ➤ Increase the analytical and critical thinking. ➤ Introduce and interpret the stream of Rationalism, Empricism and Criticism.
YEAR-III	
<p>PAPER I:</p> <p>MODERN LOGIC</p>	<p>By studying this course, a student will be able to :-</p> <ul style="list-style-type: none"> ➤ Enhance rational, analytical and scientific thinking. ➤ Enhance problem solving skills. ➤ Develop logical thinking to crack the different competitive exams.
<p>PAPER II-</p> <p>PHILOSOPHY</p>	<p>The outcome of this course is to :-</p> <ul style="list-style-type: none"> ➤ Know the meaning of 'Religion' and 'Dharma' along with the relation with science and other disciplines. ➤ Compare the different religions. ➤ Develop the feelings of respect to other religions.



B.A. (PUBLIC ADMINISTRATION) PROGRAM SPECIFIC OUTCOMES

COURSE OUTCOMES

YEAR-I

PAPER I- PRINCIPLES OF ADMINISTRATION: Major

- Developing an awareness about the evolution and nature and scope of the discipline of Public Administration
- Comprehending the new contours and changing paradigms of Public Administration.
- Understanding the structure and principles of organization.
- Getting acquainted with the theories, approaches, concepts and principles of Public Administration
- Acquiring knowledge about the administrative theories and concepts to make sense of administrative practices.

PAPER II- INDIAN ADMINISTRATION Major, Minor, Elective

- Knowledge regarding the origin and evolution of Indian Administration will be acquired.
- Learning about the constitutional and structural framework on which Indian Administration is based.
- Understanding the functioning of various administrative agencies under the Indian federal structure.
- Awareness about the institutions and mechanism for citizen-state interface.

YEAR- II

PAPER I- ORGANISATION AND MANAGEMENT:

- Understanding the structure of organization and the role chief executive in it.
- Knowledge about Line and Staff agencies. Ability to distinguish between the structure and the functions of Department, Public Corporations and Independent regulatory commissions.
- Enhancing the ability of management with knowledge acquired through the study of New Public Management.
- Learning about the tools of management, such as leadership, decision making and motivation, that may develop administrative skills in a student.
- Developing skills of preparing and responding in disaster situations and understanding the importance and characteristics of good governance.



**PAPER II-
PERSONNEL
AND FINANCIAL
ADMINISTRATION:**

- Getting exposure to the concept of Civil Service and its development. Students would understand bureaucracy, its various shades and the importance of human development.
- Attain knowledge about types and methods of recruitment, training and promotion in public administration. Learning the various methods of recruitment in the civil services and the benefits accorded to them.
- Getting a broad knowledge about financial administration and its structure.
- Learning about Budget in general and the entire budgetary process in India.
- Developing an understanding about the financial committees, the importance of accounting and auditing and the role of Comptroller and Auditor General.

YEAR-III

**PAPER I-
CENTRAL AND
STATE
ADMINISTRATION
(WITH SPECIAL
REFERENCE OF
M.P.)**

- Acquiring knowledge regarding origin, evolution and features of Public Administration in India.
- Knowledge about the constitutional and structural framework on which Indian Administration is based.
- Awareness about the institutions and mechanisms in force for citizen-state interface.
- Theoretical clarity about administrative structure of the state administration with special reference to Madhya Pradesh.
- Getting an overview of district administration, with particular focus on powers of the Collector.

**PAPER II-
LOCAL SELF
GOVERNMENT
AND
DEVELOPMENT
ADMINISTRATION**

- Acquiring theoretical knowledge of the 73rd and 74th constitutional amendments on local governance.
- Gaining insights about composition, role and functions, resources of Panchayati raj institutions.
- Understanding about the organization, functions and working of urban local bodies
- Developing a conceptual and theoretical understanding of Development Administration.
- Understanding relationship between economic and political development and social change and the role played by bureaucracy in development.



B.A(Sanskrit)

COURSE OUTCOMES

B.A Year-I

Paper I वेद और व्याकरण

- विश्व की धरोहर के रूप के रूप में घोषित ऋग्वेद सहित सम्पूर्ण वैदिक साहित्य की ज्ञान महिमा से छात्र लाभान्वित होंगे।
- व्याकरण के माध्यम से संस्कृत भाषा साहित्य की संरचना की समझ में सहायक
- छात्र में संस्कृत लेखन और अनुवाद की कला का विकास होगा
- छात्र के धार्मिक और आध्यात्मिक व मनोवैज्ञानिक विकास होगा।
- प्रकृति और पर्यावरण संरक्षण की प्रेरणा मिलेगी।
- प्राचीन देवताओं और यज्ञ विधाओं से छात्र सुपरिचित हो सकेगा।
- पृथ्वी की महिमा से अवगत होकर छात्रों में पृथ्वी माता के प्रति समर्पण की भावना विकसित होगी।
- वाक्य निर्माण व प्रयोग का ज्ञान
- संस्कृत भाषा में अनुवाद कला एवं सम्भाषण कौशल का विकास होगा।

Paper II आर्षकाव्य एवं लौकिक काव्य

- नैतिक मूल्यों के विकास में सहायक।
- रामायण की सार्वकालिक व सार्वजनिक उपादेयता के साथ राष्ट्रनिर्माण में सहायक।
- भारतीय संस्कृति के अवबोध एवं महापुरुषों के आदर्श से छात्रों को परिचित कराना।
- प्राचीन सामाजिक संरचना एवं उत्कृष्ट समाज का ज्ञान।
- रंगमंचीय कौशल के विकास व लेखन की कला की दृष्टि से उपादेय।
- छात्र में कथा लेखन की शैलीकाविकास।
- उपदेशात्मककाव्यसेनैतिकमूल्योंकाविकास।

B.A Year-II

Paper I – गद्य दर्शन एवं व्याकरण

व्याकरण पर आधारित कादम्बरी शुकनासोपदेशः के आधार पर राजा चन्द्रपीड के चरित्र के आधार पर छात्रों को अपने चरित्र निर्माण करने में सहायता मिलती है। साथ ही साथ आस्तिक एवं नास्तिक दर्शन एवं भारतीय संस्कृति एवं संस्कारों का ज्ञान उन्हें प्राप्त होता है। चतुर्थ एवं पंचम इकाई के आधार पर व्याकरण का ज्ञान भी उन्हें प्राप्त होता है।

Paper II – महाकाव्य एवं नाटक

पाठ्यक्रम के आधार पर छात्रों को महाकाव्य- कुमारसुम्भ्वम् से पार्वती के समान कठिन तप एवं परिश्रम करने के लिए प्रेरणा प्राप्त होती है। साथ में छात्रों को नाट्यशास्त्र का ज्ञान उन्हें सिनेमाजगत एवं राष्ट्र मंच पर प्रतिभा दिखाने का अवसर प्रदान करता है। चतुर्थ एवं पंचम इकाई के आधार पर विभिन्न साहित्यकारों एवं राजाओं का ज्ञान प्राप्त करके उनके समान चरित्र-निर्माण करने का अवसर एवं आदर्श नागरिक बनने की शिक्षा प्राप्त होती है।



B.A Year-III

<p>Paper I काव्य व्याकरण एवं भाषा विज्ञान</p>	<p>पाठ्यक्रम के आधार पर श्रीमद्-भगवद्गीता छात्रों की कर्तव्य करने की दृढ़ इच्छा शक्ति को और भी प्रबल करती है। साथ ही साथ उपनिषदों का ज्ञान, व्याकरण का ज्ञान, भाषा विज्ञान, भाषा का महत्व, संस्कृत भाषा के विकास में महत्वपूर्ण योगदान रखता है।</p>
<p>Paper II काव्य, रस, छन्द एवं अलंकार</p>	<p>पाठ्यक्रम पर आधारित किरातार्जुनीयम् से अपने लक्ष्यों को प्राप्त करने की मौलिक शिक्षा मिलती है। इसके अनन्तर पाठ्यक्रम में राम के उदात्त चरित्र, नीतिशास्त्र से नीति का ज्ञान, महाकाव्य एवं व्याकरण संबंधित सम्पूर्ण ज्ञान छात्रों को कौशल विकास में सहायक है।</p>



B.A.I (SOCIOLOGY) PROGRAM SPECIFIC OUTCOMES

- ✓ This programme enables students to enter the second year of B.A. degree programme. Every student has to pass this programme to complete his three year degree programme.
- ✓ Three subjects a student opts for his/her B.A. degree each subject includes two compulsory papers in the 1st year of B.A. degree programme. Hence a student gets comprehensive knowledge about at least two branches of each subject.

COURSE OUTCOMES

YEAR I

<p>PAPER I</p> <p>Indian Society and Culture</p> <p>Major</p>	<ul style="list-style-type: none"> ➤ The students will get an Impression About the basic compositions of Indian Society, its historical Society and the Institutions, Basic Philosophical foundation of the society. ➤ The students will have extensive comprehension of Indian Traditions and the opportunity to explore and express them. ➤ They will also learn in detail about the three layers of Indian society namely aranakya, Lok (Gramya and Nagar). ➤ After reading this course student will be able to understand and strengthen local / regional employment avenue.
<p>PAPER II –</p> <p>Basic concept of sociology</p> <p>Major, Minor, Electives</p>	<p>After completing the course the students will be able to:-</p> <ul style="list-style-type: none"> ➤ Develop keen insight to distinguish between the commonsense knowledge and sociological knowledge. ➤ Comprehend the conceptual learning of society and social groups. ➤ Get information about various employment opportunity.

YEAR-II

<p>PAPER I</p> <p>Social Process And Change</p>	<ul style="list-style-type: none"> ➤ The theoretical knowledge of social change will be helpful in holistic comprehensive of society. ➤ It will be also equip the students to work in the field of administration, social welfare, planning, social reformation and reconstruction. ➤ Study of social change is also essential for fruitful research on any aspect of social life. This Paper also significant from this point of view.
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<p>PAPER II</p> <p>Rural Urban And Tribal Society</p>	<ul style="list-style-type: none"> ➤ A student well versed in this paper gets job opportunities in NGOs and Government departments dealing with Tribal welfare, Rural development and Urban planning and management issues. ➤ The students can carry fruitful research about tribal, rural and urban society
<p>YEAR-III</p>	
<p>PAPER I Sociological Thinkers</p>	<ul style="list-style-type: none"> ➤ Comprehensive of Sociological is incomplete without the knowledge of its founders their socio-economic background and their perspective. This paper provides the students with all this information. ➤ This paper also helps students to link Sociological Concepts and Theories of the Pioneer Sociologists with social research.
<p>PAPER II</p> <p>Methods Of Social Research</p>	<ul style="list-style-type: none"> ➤ This paper will help students to develop research insight. ➤ It will help teach them about the importance of reality and the ways to obtain objective reliable information. ➤ This paper will also acquaint them with scientific ways of studying social phenomena.



B.A. (URDU) PROGRAM SPECIFIC OUTCOMES

COURSE OUTCOMES

YEAR-I

PAPER I
नस्र : सावनेह, खाके,
इन्शा:

इस निसाब के ज़रिये पहले साल में तुलबा (विद्यार्थी) नसर और उर्दू कम्प्यूटर की तालीम के साथ रोजगार हासिल करने में मदद ले सकता है।

PAPER II
नज़्म : उर्दू गज़ल

इस निसाब के पढ़कर पहले साल में तुलबा (विद्यार्थी) उर्दू गज़ल और स्क्रिप्ट राईटिंग के ज़रिये मूकालमें लिखकर रोजगार हासिल कर सकते हैं।

YEAR-II

PAPER I
नस्र : दास्तान, नाविल
और अफ़साना

इस निसाब के ज़रिये तुलबा दास्तां, नाविल और अफसानों की (इबारत ख़ानी) पाठ से अच्छे अख़लाक़, अच्छे किरदार, हमदर्दी, दूसरों की मदद करना, इतेहाद और इल्तेफ़ाक़ से रहना कौम और वतन के लिए मर मिटने का जज़्बा पैदा करना है।

PAPER II
नज़्म : मन्ज़ुमात-ओ-
मस्नवियात

YEAR-III

PAPER I
खुतुत, ड्रामा- मज़ामीनो
मकालान

इस निसाब के ज़रिये पुराने तुलबा को पुराने और नए अदब कोसहज के रखना, नये और पुराने अदब में फर्क़ करना है। तुलबा में अदब से दिलचस्पी पैदा करना है।

PAPER II
नज़्म- कसीदा- ओ-
मरसिया

खुतुत नवीसी वॉट्सऐप का पुराना रूप है। ड्रामा और मजामीन लिखकर रोजगार हासिल किया जा सकता है। इनको पढ़कर नौजवानों में अच्छे किरदार पैदा करने और समाज में फैली बुराईयों को दूर किया जा सकता है।



Faculty of Commerce

B.Com. (Bachelor of Commerce)

PROGRAM OUTCOMES (PO):

- ❖ The course provides a platform for experimental learning and grooms students towards industry specific curriculum with focused approach on specific areas which are crucial in the management of companies.
- ❖ After completing three years for Bachelors in Commerce (B.Com) program, students would gain a thorough grounding in the fundamentals of Commerce, Management, Marketing and Finance.
- ❖ The course is focused on the all-round development of the students' personality through proper education and exposure to the vast treasure of knowledge.
- ❖ The course provides exposure to students in the latest trends in relevant branches of knowledge giving them the needed competence and creativity to face global challenges and enhance Entrepreneurship Potential.
- ❖ Students have a plethora of choices to pursue professional courses such as CA, MBA, CMA, ICWA, CS, CFA, etc.
- ❖ The students will be ready for employment in functional areas like accounting, taxation, banking, insurance and corporate law.
- ❖ Student can opt various disciplines for Post-Graduation such as Commerce and Humanities.

PROGRAM SPECIFIC OUTCOMES (PSO):

B.COM WITH APPLIED ECONOMICS:

- ❖ Students will be able to understand economic vocabulary, methodologies, tools and procedures.
- ❖ Students will be familiar with the knowledge and application of micro economics for the formulation of policies and planning.
- ❖ Students will learn to apply economic theories and concepts to contemporary social issues, as well as analysis of policies.
- ❖ Students will be able to understand the impact of government policies and will be able to assess the consequences of the policies on the parties involved.
- ❖ It enhances them to compute and assess the real situation of the economy including the size and changes of population, income pattern, and rate of development with pattern of savings and investments and social security measures adopted in the country.
- ❖ Students will be able to pursue their career as Financial Analyst apart from different positions in the



field of accounting, taxation, banking, insurance and corporate law.

B.Com with Computer Applications:

Students will improve their computer literacy, their basic understanding of operative systems and a working knowledge of software commonly used in academic and professional environments.

Students will learn to organize information efficiently in the forms of outlines, charts, etc. using appropriate software.

Students will acquire skills for designing and delivering an effective presentation and developing the various IT skills to electronic databases.

- ✓ Students will be able to design and implement a web page.
- ✓ students will be able to perform E-Banking, E-Marketing, E-Learning, E-Shopping
- ✓ Students will understand the concept of supply chain management & customer relationship management
- ✓ Students will be able to perform any C++ programming tasks.

B.Com with Advertising:

- ❖ The course exposes the students to the rigors of international advertising and equips them to be able to manage the media along with different aids of advertising in the international markets.
- ❖ Students will understand the concept of creativity in depth with the knowledge of growing importance of creativity in Ads in today's competitive world.
- ❖ The course enables the students to develop skills required for job/vocation in advertising, personal selling and salesmanship.
- ❖ Students will be equipped with skills required to motivate and train the sales force and enhance their productivity.
- ❖ The course enables the students to pursue post graduate programs in Advertising, Marketing, and Digital Marketing, Advertising cum Public Relations, Media Management etc.
- ❖ After completion of the course, students can pursue their carriers as Client Service Manager, Account Executive, Copywriter, Content writer, Marketing Research Executive etc.



Course Outcomes

B.Com I Year

<p>Paper I: Financial Accounting Major</p>	<p>Succession completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> ➤ Acquire conceptual knowledge of basics of accounting ➤ Identify events that need to be recorded in the accounting records ➤ Develop the skill of recording financial transaction and preparation of reports in accordance with GAAP ➤ Describe the role of accounting information and its limitation ➤ Equip with the knowledge of accounting process and preparation of in a accounts of sole trader ➤ Identify and analyse the reasons for the difference between cash book and pass book balances ➤ Recognize circumstances providing for increased exposure to errors and frauds.
<p>Paper II: Business Regulatory Framework Major, Minor, Elective</p>	<ul style="list-style-type: none"> ➤ The outcome of this course is to provide the students with practical legal knowledge of general business law issues. ➤ To Understand the Essentials of A Valid Contract, The Laws of The Act, Consideration And The Various Modes of Discharge of A Contract. ➤ To Explain the Various Laws with Regard to The Sale of Goods and Performance of a Sale Contract and Remedial Measures, to Familiarize the Students with The Various Law with Regard to Consumer Protection in India And the Functions of Various Consumer Forums and to Understand the Meaning and The Various Legislations with Regard to The Cyber Laws
<p>Minor Paper I: Business Organization And Communication</p>	<p>After completion of this course it is expected that the student shall understand the basics of the business and will able to imbibe how any business can be organized successfully the chapters related communication shall be able to elucidate how communication plays an important role in modern business scenario.</p>



Elective for Applied Economic Group: Business Economics	<p>Upon successful completion of the course a student will be able to</p> <ul style="list-style-type: none"> ➤ Understand how households (demand) and businesses (supply) interact in various market structures to determine price and quantity of a good produced. ➤ Understand the links between household behavior and the economic models of demand. ➤ Represent demand, in graphical form, including the downward slope of the demand curve and what shifts the demand curve. ➤ Understand the links between production costs and the economic models of supply ➤ Understand the concept of Pricing. ➤ Analyze operations of markets under varying competitive conditions.
Elective for Advertisement Group: Sales Promotion	<p>Students will be able to understand:-</p> <p>The Meaning and Importance of Sales promotion. Types, tools and Programme of Sales promotion, Sales Promotion- result to increase sales of organization</p>
Vocational for Applied Economics Group Office Procedure and Practice	<ul style="list-style-type: none"> ➤ After studying this course the student will be able to Understand office record keeping, Record management and filing. ➤ Understand about office forms, register and the mail management. ➤ Understand the Budget and audit system in the Office. ➤ Understand the procedure and record keeping of various deductions like professional tax, Goods and Service tax, Income tax, Provident Fund and Insurance.
Vocational for Advertising Group: Salesmanship	<p>After studying this Course the Student will be able to</p> <ul style="list-style-type: none"> ➤ Basic Selling Techniques: Demonstrate effective selling skills. ➤ Contract and Sales Negotiations: Apply negotiation techniques to selling situations. ➤ Customer Profiling: Identify and profile the various selling styles. ➤ Sales Proposal Writing: Apply the principles of proposal writing. ➤ Customer Service Skills: Identify successful techniques for working with customers in business situations.



- Provides students with the knowledge and skills necessary to enable them to perform adequately in any single functional area of sales management.
- Helps developing effective selling skills as required in the today's competitive industry.

B.COM II YEAR

CORPORATE ACCOUNTING

On successful completion of this course students will be able to:

- Construct the financial statements of company within the frame work of Indian Accounting Standards.
- Explain the implication of unethical accounting practices on the society.
- Enlighten the students on the accounting procedures followed by the Companies.
- To make aware the students about the valuation of shares and Goodwill.
- To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.

COST ACCOUNTING

After completing this course students will be able to-

- Understand various costing systems and management systems.
- Analyze and provide recommendations to improve the operations of organizations through the application of Cost and Management accounting techniques.
- Evaluate the costs and benefits of different conventional and contemporary costing systems.
- Differentiate methods of inventory management.
- Identify the specifics of different costing methods.
- Analyze cost-volume-profit techniques to determine optimal managerial decisions.
- Apply cost accounting methods for both manufacturing and service industry.

Principles of Statistics

After completing this course students will be able to-

- Understand basic statistical concepts such as statistical collection,



statistical series, tabular and graphical representation of data.

- Calculate measures of central tendency, dispersion, symmetry and correlation analysis.
- Independently calculate basic statistical parameters viz- mean, measures of dispersion, correlation coefficient, indexes.
- Based on the acquired knowledge to interpret the meaning of the calculated statistical indicators.
- Choose a statistical method for solving practical problems.
- Highlight statistical relationships between variables in data sets.
- Predict values of strategic variables using correlation analysis.

Principles of Management

After completing this course students will be able to-

- To have clear understanding of managerial functions like planning, organizing, directing, budgeting, etc. and have same basic knowledge on international aspect of management.
- To understand the planning process in the organization.
- To understand all the aspects of organization.
- Demonstrate the ability of directing, leadership and communicate effectively.
- To formulate best controlling techniques and methods.

Indian Company Act

After completing this course students will be able to-

- Gain complete knowledge of company right from incorporation to winding up.
- Gain complete knowledge of company law in India.
- Know about the concept of shares and debentures.
- Understand the memorandum of association and article of association in a company.
- Know about the use of prospectus in a company.

BANKING & INSURANCE

After completing this course students will be able to-

- To have knowledge of banking, insurance and capital market law besides fundamental legal knowledge.



- To express their opinions about banking and insurance in written and oral form, based on the basic knowledge and skills they acquire.
- To make the students understand the various services offered and various risks faced by banks.
- To make them aware of various banking innovations these days.
- To give them an overview about insurance industry.
- To make the students understand various principles, provisions that govern the Life and General Insurance Contracts.

Advertising II

After completing this course students will be able to-

- Describe the significance of advertising concepts- like branding ,products and services promotion competitive selling .
- They will be able to demonstrate the leadership and management attributes by starting an advertising agency .
- Also they can apply the knowledge of advertising in preparing effective advertisements for varied products and services.
- Recognize the futuristic and creative approach of the subject it is indeed a vocational and job oriented program also career prospects are very high and rewarding .In sectors like film, television ,radio, print media and electronic media advertising .
- Online and social media advertising are indispensable for present day business and corporate needs.
- Understand the structure and workings of advertising agencies.

PERSONAL SELLING AND SALESMANSHIP P

After completing this course students will be able to-

- Describe the importance of direct selling and door to door selling with the practical approach .
- Students will be able to emerge as a trained sales professional and qualified sales manager.
- The student can apply the knowledge of personal selling concepts while preparing sales operation report, tour diary cash memo, order book, periodical reports etc.
- Identify the problems of selling operations and suggesting appropriate solutions.
- Personal selling and salesmanship highlights the importance of



relationship marketing and after sales services .

- The knowledge of the process of effective selling like prospecting presentation, demonstration, handling of objections clinching the deal and post sale activities are of great utility.

B.COM III YEAR

INCOME TAX LAW & PRACTICE

After completing this course students will be able to-

- After studying income tax students knows the provisions for calculating taxable income and tax thereon.
- Acquire the complete knowledge of basic concepts of income tax
- Understand the concept of exempted incomes.
- Understand the provisions of agricultural income
- Calculate Residential status of a person.
- Identify and comply with the relevant provisions of the Income Tax Act as it relates to the income tax of individuals.
- Compute the income under the head” Income from Salary” ,“Income from House Property and “Income from Business or Profession”.
- In future students can become a tax consultant.

GOODS AND SERVICE TAX & CUSTOM DUTY

After completing this course students will be able to-

- Explain the structure and analyse the benefits of GST.
- Describe the functions, powers and structure of GST Council and GSTN.
- Define basic concepts and terms under CGST Act and IGST Act.
- Explain the provisions of levy and collection of GST.
- Describe the provisions of Reverse Charge Mechanism and composition scheme of levy.
- Explain the concept of time, place and value of supply.
- Explain importance and benefits of Input Tax Credit.
- Describe the provisions, types and procedures of Registration.
- Outline the provisions concerned with payment of Tax, interest, IDS, TCS , Refund and returns.



MANAGEMENT ACCOUNTING

After completing this course students will be able to-

- Explain the application of management accounting and the various tools used.
- Make inter-firm and inter-period comparison, of financial statements.
- Analyze the financial statement using various ratios.
- Prepare Fund Flow Statement and Cash Flow Statement.
- Prepare different budgets for the business.

AUDITING

After completing this course students will be able to-

- The course is intended to acquaint the student with auditing standards and the general procedures required in conducting an audit.
- The successful student, upon completion of the course will have a basic understanding of generally accepted auditing standards, audit reporting and the theory and methodology of auditing.
- He/she will develop an appreciation for the importance of the ethical standards of certified public accountants, the need for keeping abreast of current accounting issues and regulations and the degree of professionalism required to the successful accountant.
- The students will be able to demonstrate an understanding of the nature and scope of auditing and related services.
- The students will be able to demonstrate awareness, knowledge and appreciation in application of auditing principles and practices in global business operations.
- Through the auditing course, the student will be able to exhibit knowledge of different functions of business and appreciation of integrated functional business areas and make use of adaptive and innovative skills in solving business problems.

PUBLIC FINANCE

After completing this course students will be able to-

- Understand the meaning and relevance of Public finance.
- Have conceptual clarity of public expenditure and revenue theories.
- Apply the principle of optimal taxation in analysing various governments tax policies.
- Know the application of public economics in analysing various energy policies.



- Comprehend various types of public goods and its real world application.
- Apply and integrate Equity and Efficiency Economics principles to analyse energy consumption.

FINANCIAL MANAGEMENT

After completing this course the students will be able to

- Demonstrate an understanding of the overall role and importance of the finance function.
- Demonstrate basic finance management knowledge.
- Communicate effectively using standard business terminology.
- Explain the concept of fundamental financial concepts, especially time value of money.
- Apply capital budgeting projects using traditional methods.
- Analyze the main ways of raising capital and their respective advantages and disadvantages in different circumstances.
- Integrate the concept and apply the financial concepts to calculate ratios and do the capital budgeting.

MANAGEMENT OF SALES FORCE

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

- To know the distinction between the skills required for Selling and Sales Management.
- To Evaluate Sales and Sales Management strategies in relation to current legal and ethical standards of practice.
- To Understand key principles in managing a sales team in today's business context.
- To expose the students in field studies related to the field of Sales Management.
- For developing a plan for organizing, staffing and training a sales force.

ONLINE MARKETING

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

- To provide an understanding of the ever evolving digital world and examines the strategic role of digital marketing processes and tools in designing the overall marketing strategy.
- Students can effectively run advertisements on search engines.



- Through E-business and E-Commerce students are closely related to digital India which is need of time.
- To develop skills in main areas of digital marketing as Search Engine Marketing; Content Marketing; Social Media marketing; Email marketing and Affiliate marketing.
- To apply and understand the most common online payment systems and their functioning.
- To understand mobile marketing measurement and analysis.



Faculty of Computer Application

B.Sc. / B.Com Computer Application Programme

Programme Outcomes

- The basic objective of the programme is to develop scholars potentially rich & employable in the field of computer application and information technology.
- They can pursue higher studies in the area of Computer Application.
- Scholars can be self - employed in Indian & global software market.
- They can acquire more practical knowledge to meet the requirements of the Industrial standards.



B.Sc. Computer Application Program Specific Outcomes

B.Sc. Computer Application is a three year full time undergraduate degree program dealing with the study related to the various aspects of computer functioning. During this course study, the students can get in-depth knowledge on Windows, Programming Languages, Operating System, Web Designing and more.

COURSE OUTCOMES

YEAR-I

<p>Major I :</p> <p>Programming in C Language</p>	<p>On the completion of this course student will be able -</p> <ul style="list-style-type: none"> ➤ To explore basics of C programming languages. ➤ To approach the programming tasks using techniques learned and write pseudo-code. ➤ To choose the right data representation formats based on the requirements of the problem ➤ To use the comparisons and limitations of the various programming constructs and choose the right one for the task in hand. ➤ To identify tasks in which the numerical techniques learned are applicable and apply them to write programs, and hence use computers effectively to solve the task.
<p>Major-II/Minor/ Elective:</p> <p>Data Processing Software</p>	<p>On the completion of this course student will be able -</p> <ul style="list-style-type: none"> ➤ To understand the basic concept of various applications of software. ➤ To gain knowledge of MS Word, Excel, Access and Power Point. ➤ To apply acquired knowledge in office automation tasks. ➤ To study various methods of formatting of documentation and use of spreadsheets ➤ To develop and enhance presentation skills using power point.



Vocational- I

Digital Marketing

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

- Understand digital marketing, importance thereof, meaning of web side and levels of web site, difference between blog; portal & amp; website.
- Understand the working of SEO (search engine optimization) on page optimization, off page optimization, and will learn to prepare reports.
- Learn about SMO (social media optimization) like Facebook, twitter, Linked In, Tumblr, Pinterest and other social media services optimization.
- Understand paid tools like Google ad words, display advertising techniques.
- Learn and apply hands on experience on tools useful to SEO for analysis on website traffic, keyword analysis and learn email marketing and ad designing.

Vocational Web Designing

After studying this course the student will be able -

- Code a handful of useful HTML & CSS examples.
- Build semantic, HTML & CSS web page.
- Write basic scripts
- Use Names, Objects and Methods.
- Add Interactivity to a Web Page.
- Create Dynamic Web Pages Using Jawa Script in HTML forms.



B. Sc / B.Com Computer Application (Program Specific Outcomes)

B.Sc./B.Com. Computer Application is a three year full time undergraduate degree program dealing with the study related to the various aspects of computer functioning. During this course study, the students can get in-depth knowledge on Windows, Programming Languages, Operating System, Web Designing and more.

COURSE OUTCOMES

YEAR-II

<p>Paper I :</p> <p>Internet and Ecommerce</p>	<p>The objective of the course is to understand the basics principles of internet and World Wide Web. They will be able to do E-commerce.</p> <ul style="list-style-type: none"> ➤ Students will come to know the Concept of internet, Its history, Internet Services , Connectivity. ➤ They will learn the concept of internet addressing, Web servers etc. they will also learn methodologies and tools for access websites, portals, downloading and uploading data. ➤ Develop skills in concept of Email and various terminologies associated with it. ➤ Become familiar with E-Commerce, E-Commerce models, E-Marketing versus Traditional Marketing, E-Security, E-Payment System.
<p>Paper II:</p> <p>Relational Database Management System</p>	<p>The objective of the course is to understand the concept of database management Systems. The course gives the knowledge about structure and use of various database management systems with major focus on relational database design.</p> <ul style="list-style-type: none"> ➤ After studying this course, students will be able to appreciate the applications of database systems. ➤ Students will be able to develop database applications with all the constraints which help in storing and retrieving data easily. ➤ Student will be able to effectively work with DBMS like MS-ACCESS, MySQL, Oracle and DB2 via SQL Interface.

YEAR-III



**Paper I:
Web Designing**

The objective of the course is to understand the basics principles of internet and World Wide Web. They will be able to design an effective web page by studying markup languages

- Students will come to know the concept of internet, its history and evolution process.
- They will learn the concept of internet addressing, Web servers etc. they will also learn methodologies and tools for access websites, portals, downloading and uploading data.
- Develop skills in concept of Email and various terminologies associated with it.
- Become familiar with Markup languages, will learn the language of the web and have hands on HTML and CSS in details. Like techniques of web design, Form Design, Table Design, controls on forms.

**Paper II:
Digital Marketing**

The objective of this course is to introduce students with basic concepts of Digital Marketing , its functions and services. The students will understand the marketing process.

- Students will learn Digital marketing and its process, visibility its types and example, Visitor Engagement, Bringing targeted traffic, inbound, outbound, conversion process, retention and its types, performance evaluation.
- Students will learn the concept of internet and website, Web servers & its types, web hosting, domain name, extension etc. they will also learn to plan , conceptualizing and build a website using CMS in class , downloading and uploading data.
- Students will learn the concept of Google analytics, set up analytics account and add analytics code in website, understanding goals and conversions, bounce rate, difference between bounce rate, exit rate and reduce rate, Monitoring traffic sources.
- Students will learn the marketing of social networking websites like Virtual , Face book, Twitter, LinkedIn, Google Plus, Video and Pinterst marketing.
- Students will understand SEO and its importance, Google Adwords overview and its algorithm, creating search campaigns and ads, tracking performance / conversion, optimizing search campaigns and creating display campaign.



B.Sc. Computer Science

COURSE OUTCOMES

YEAR-I

<p>Major I :</p> <p>Computer System Architecture</p>	<p>On the completion of this course, student will be able to -</p> <ul style="list-style-type: none"> ➤ Understand the basic structure, operation and characteristics of digital computer. ➤ Be able to design simple combinational digital circuits based on given parameters. ➤ Familiarity with working of arithmetic and logic unit as well as the concept of pipelining. ➤ Know about hierarchical memory system including cache memories and virtual memory. ➤ Understand concept and advantages of parallelism, threading, multiprocessors and multi core processors. ➤ Know the contributions of Indians in the field of computer architecture and related technologies.
<p>Major II/Minor/Elective :</p> <p>Programming Methodologies & Data Structures</p>	<p>On the completion of this course, learners will be able to -</p> <ul style="list-style-type: none"> ➤ Develop simple algorithms and flow charts to solve a problem with programming using top down design principles. ➤ Writing efficient and well-structured computer algorithms/programs. ➤ Learn to formulate iterative solutions and array processing algorithms for problems. ➤ Use recursive techniques, pointers and searching methods in programming. ➤ Will be familiar with fundamental data structures, their implementation; become accustomed to the description of algorithms in both functional and procedural styles. ➤ Have knowledge of complexity of basic operations like insert, delete, search on these data structures. ➤ Possess ability to choose a data structure to suitably model any data used in computer applications.



- Design programs using various data structures including hash tables. Binary and general search trees, heaps, graphs etc.
- Assess efficiency tradeoffs among different data structure implementations.
- Implement and know the applications of algorithms for searching and sorting etc.
- Know the contributions of Indians in the field of programming and data structures.



BCA

COURSE OUTCOMES

YEAR-I

<p>Major I :</p> <p>Computer Fundamentals, Organization and Architecture</p>	<p>On completion of this course, learners will be able to -</p> <ul style="list-style-type: none"> ➤ Familiarity with parts of the computer and peripheral devices used with the computer. ➤ Realization of the basic logic and universal gates. ➤ Verify the behavior of logic gates using truth tables. ➤ Implement Binary-to-Gray, Gray-to-Binary code conversions. ➤ Design half and full adder circuit using basic gates. ➤ Design and construct flip flops and verify the excitation tables.
<p>Major-II</p> <p>Programming Methodology & Data structures</p>	<p>On completion of this course, learners will be able to -</p> <ul style="list-style-type: none"> ➤ Develop simple algorithms and flow charts to solve a problem with programming using top down design principles. ➤ Writing efficient and well-structured computer algorithms/programs. ➤ Learn to formulate iterative solutions and array processing algorithms for problems. ➤ Use recursive techniques, pointers and searching methods in programming. ➤ Will be familiar with fundamental data structures, their implementation; become accustomed to the description of algorithms in both functional and procedural styles. ➤ Have knowledge of complexity of basic operations like insert, delete search on these data structures. ➤ Possess ability to choose a data structure to suitable model any data used in Computer Applications. ➤ Design programs using various data structures including hash tables. Binary and general search trees, heaps, graphs etc.



- Assess efficiency tradeoffs among different data structure implementations.
- Implement and know the applications of algorithms for searching and sorting etc.
- Know the contributions of Indians in the field of programming and data structures.



Faculty of Home Science

B.SC. (HOME SCIENCE) HUMAN DEVELOPMENT

PROGRAM OUTCOME

- ✓ Deliver quality tertiary education through learning while doing.
- ✓ Reflect universal and domain-specific values in Home Science.
- ✓ Involve, communicate and engage key stakeholders.
- ✓ Preach and practice change as a continuum.
- ✓ Develop the ability to address the complexities and interface among of self, societal and national priorities.
- ✓ Generate multi-skilled leaders with a holistic perspective that cuts across disciplines. Instill both generic and subject-specific skills to succeed in the employment market.
- ✓ Foster a genre of responsible students with a passion for lifelong learning and entrepreneurship.
- ✓ Develop sensitivity, resourcefulness and competence to render service to families, communities, and the nation at large.
- ✓ Promote research, innovation and design (product) development favouring all the disciplines in Home Science.
- ✓ Enhance digital literacy and apply them to engage in real time problem solving and ideation related to all fields of Home Science.
- ✓ Appreciate and benefit from the symbiotic relationship among the five core disciplines of Home Science – Resource Management, Food Science and Nutrition, Textiles and Clothing, Human Development and Family Studies and Extension and Communication



B.SC. (HOME SCIENCE) HUMAN DEVELOPMENT

PROGRAM SPECIFIC OUTCOMES:

- ✓ Describe how individuals develop and change from womb to tomb
- ✓ Relate the principles of human development with self, family and society
- ✓ Apply methods of teaching and training towards administration of early learning centres
- ✓ Appraise and identify life situations in need of referral services
- ✓ Manage life crisis at every stage of life span

COURSE OUTCOMES:

YEAR I

<p>PAPER</p> <p>Life Span Development-I</p>	<ul style="list-style-type: none"> ➤ Identify the different stages of human life span and their developmental tasks ➤ Understand the impact of specific cultural practices- Family and Community in child's life ➤ Understand child's behavior and their developmental domains occurring in infancy and childhood.
<p>PAPER</p> <p>Introduction To Extension And Communication Elective</p>	<ul style="list-style-type: none"> ➤ Compile the concept related to Extension Education . ➤ Discuss on different types of media , Methods and various audio, audio-visual teaching aids its uses in the implementation of programme . ➤ Critically analyze theories and concepts of gender and development. ➤ Analyze woman rights in terms of gender equality and gender equity. ➤ Critically analyze existing laws and the legal system through a gender lens.

YEAR II

<p>PAPER</p> <p>EARLY CHILDHOOD AND CHILDHOOD EDUCATION</p>	<ul style="list-style-type: none"> ➤ Explain the importance of early childhood years and significance of intervention programs for early childhood development. ➤ Analyze the historical developments – global and Indian including the current programs and policies in ECCE. ➤ Identify various indigenous (Indian) models of Early Childhood Education and apply it to understand the current early childhood research, theoretical trends
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and issues.

- Analyze curriculum models and pedagogical approaches in early childhood education.
- Create developmentally appropriate programs for children in two to six years of life and late childhood

**PAPER
– RURAL
DEVELOPMENT**

- Discuss the knowledge, skill and attitude to work with the Rural communities and Get sensitized on the issues of Rural society
- Critically analyze rural development and rural leadership
- Explain the governmental policies on women and role of women as partner in development .
- Compare community development with community organization
- Discuss significant phases in community development and Envisage the role of community-based organizations in community development
- Compile the knowledge on sustainability and community development concepts

**PAPER-VI ELECTIVE
PAPER – JOB
ORIENTED COURSE –
PRE-SCHOOL
EDUCATION**

- Apply the skills to use principles of pedagogy and curricular framework for optimal development through ECCE programs
- Apply the methods to address socio-cultural diversity through local and global methods and practices
- Prepare and develop strategies for effective capacity building, implementation and assessment of Pre-School care and Pre-School education programs
- Demonstrate the necessary skills to work effectively with families and form collaborative relationships with them

YEAR III

PAPER III – ADOLESCENCE AND ADULthood

- Explain the need and importance of studying adolescence and adulthood as a distinctive stage of the life-span.
- Discuss factors that affect physical, cognitive and socio-emotional development during adolescence and adulthood
- Analyze the characteristics, needs and developmental tasks of adolescence and adulthood .
- Identify the biological and environmental factors affecting development during adolescence and adulthood .
- Analyze key issues that influences adolescence and adulthood development.
- Evaluate policy recommendations for adolescents and adults across contexts.
- Evaluate developmental programs of intervention for varied groups of adolescents , adults.

PAPER- V – EXTENSION AND COMMUNICATION

- Compile the Knowledge about family and social system
- Critically analyze women empowerment and related issues
- Analyze woman rights in terms of gender equality and gender equity and Gender discrimination
- Analyze personal growth and personality development and conflict , stress and their coping strategies
- Critically analyze role of Home Science Education in Empowering a Person

Paper VI -- Elective Paper – Job Oriented Course – Guidance and Counseling

- Explain the purpose, scope, theories, and practices of Guidance and Counselling for child development.
- Compile the development needs from the lifespan perspective; identify at risk children and assess various concerns that families bring into the Guidance and Counselling process.
- Analyze the processes involved on Guidance and Counselling at different stages in life
- Apply and Utilize the basic Guidance and Counselling skills of observation, attending, active listening, empathy, appropriate questioning, paraphrasing, reflection of feeling and thought, summarization, confrontation and constructive use of silence.
- The student will be able to
 - Apply the skills to identify the problems/difficulties through the counselling process.
 - Apply the skills in using select approaches and techniques of counselling

B.Sc. (Home Science) Family Resource Management Program Specific Outcomes:

- The student will be able to develop knowledge / skill of Event Management.



- The student will be able to prepare and assess Time plan, Family Budget.
- Acquire knowledge of colour schemes, principles of design and elements of Art and their application in Interior Decoration.
- Develop skill for House planning, kitchen planning, landscaping.
- Develop the skill for preparing Alpana, Rangoli.

COURSE OUTCOMES

YEAR I

FAMILY RESOURCE MANAGEMENT

After competing this course, the student will acquire the knowledge of :

- The concept of Family Resource Management
- The process of Management in the scientific manner for the use of resources
- Imbibing nuances of human values and standards in successful management and decision making
- Effective management of time, energy, money and works simplification

YEAR II

Housing and Interior Decoration

After competing this course, the student will be able to :

- Identify the objectives of decoration and principles of Design and their application in Interior decoration.
- Discuss the principles of various elements of Art and its application in interior decoration.
- Create the skills of Indian traditional contemporary arts viz. Alpana, Rangoli etc.
- Discuss various family housing needs and different aspects of House Planning.
- Prepare plan and design for kitchen.
- Develop the skill of furniture arrangement.
- Explain and apply various colour schemes and theories in Interior decoration.

YEAR III



Housing and Interior Decoration

After competing this course, the student will be able to :

1. Identify the objectives of decoration and principles of Design and their application in Interior decoration.
2. Discuss the principles of various elements of Art and its application in interior decoration.
3. Create the skills of Indian traditional contemporary arts viz. Alpana, Rangoli etc.
4. Discuss various family housing needs and different aspects of House Planning.
5. Prepare plan and design for kitchen.
6. Develop the skill of furniture arrangement.
7. Explain and apply various colour schemes and theories in Interior decoration.



B.Sc. (Home Science) Food & Nutrition Program Specific Outcomes:

- The students will be enabled to pursue higher education and research.
- The students will understand the role and importance of food and nutrition for the welfare of the community and acquire the skills in planning diet.
- Development of intra-disciplinary skills – This opens wide range of opportunities for students in job sector. Studying wide range of subjects like Dietetics, Community Nutrition, Family Meal Management, Quantity Food Production & Service, Food Safety and Quality Control, Bakery Science, Women a, child and elderly Nutrition –both theory and practical, help students in developing skills related to various fields of nutrition.
- Scientific and Critical Thinking – Development of knowledge, skills and holistic understanding of the discipline among students. This goal is achieved through the on job trainings conducted by the Department in Hospitals and Community and the writing of a report on it.
- Health management and community upliftment- The course equips students with ability to manage a healthy society and country. This goes a long way in progress of entire nation and thus world. Students can work at both national and international level after completion of higher studies in this course.
- Self dependency- The course gives an opportunity to willing students to establish an enterprise of their own in health & food sectors.
- Deliver quality tertiary education through learning while doing.
- Reflect universal and domain-specific values in Home Science.
- Involve, communicate and engage key stakeholders.
- Develop the ability to address the complexities and interface among of self, societal and national priorities.
- Generate multi-skilled leaders with a holistic perspective that cuts across disciplines.
- Develop sensitivity, resourcefulness and competence to render service to families, communities, and the nation at large.
- Promote research, innovation and design (product) development favouring all the disciplines in Home Science.
- Enhance digital literacy and apply them to engage in real time problem solving and ideation related to all fields of Home Science.
- Appreciate and benefit from the symbiotic relationship among the five core disciplines of Home Science – Resource Management, Food Science and Nutrition, Textiles and Clothing, Human



Development and Family Studies and Extension and Communication

- Instill both generic and subject-specific skills to succeed in the employment market

COURSE OUTCOMES

YEAR- I

PAPER I- BASIC NUTRITION

A successful completion of this course will enable students to:

- Summarize and critically discuss and understand both fundamental and applied aspects of Food Science and nutrition.
- Able to explain functions of specific nutrients in maintaining health.
- Apply basic nutrition knowledge in making foods choices and obtaining an adequate diet.
- Gain knowledge about energy requirements and the Recommended Dietary Allowances.
- Understand the functions and role of macronutrients, their requirements and the effect of deficiency and excess.
- Analyze the role of various minerals and vitamins important in maintaining health.
- Appreciate the importance of water and electrolytes in the human body.
- Learns the impact of various functional foods on our health
- Gains competence in connecting the role of various nutrients in maintaining health and learn to enhance traditional recipes.
- Apply basic nutrition knowledge in making foods choices and obtaining an adequate diet.
- Understand the functions and role of macronutrients, their requirements and the effect of deficiency and excess.

PAPER II- PHYSIOLOGY

The students will be able to:

- Gain the basic knowledge of human anatomy and physiology.
- Define the main structures composing human body.
- Explains structure and functions of cells, tissues and organs, systems of the human body.
- Relates structure and functions of tissue.
- Provides excellent preparation for careers in the health professions and/or biomedical research.
- Understand and distinguish the functions of organs in the body.
- Comprehend the anatomy of the various organs.
- Illustrate the processes of the respective system.
- Get sensitized about reproductive system and functions.
- Elaborate the regulation of body fluids and blood parameters.

YEAR II



PAPER I- Nutritional Biochemistry

After studying this course the student will be able to:

- Demonstrate an understanding of fundamental biochemical principles, such as the structure/function of biomolecules, metabolic pathways, and the regulation of biological/biochemical processes .
- To Communicate the concepts and results of their laboratory experiments through effective writing and/or oral communication using the discipline standards for reporting and citation
- To analyze critically and evaluate constructively the concept of science and effectively bring out the knowledge derived from that
- To gain insight into the most significant molecular and cell-based methods used today to expand our understanding of biology .
- Be able to integrate knowledge learned in discipline specific courses. to understand and gain theory & practical knowledge on different food groups and their nutritive value, Biological cycles involved in metabolism.
- understand and gain theory & practical knowledge on the Physiology and Bio-chemistry in cell like role enzymes hormones and water balance.
- Life regulation based on Micro and Macro elements & Ion balance.
- To study the importance of dietary component and their physiological functions.
- To understand consequence of nutritional deficiency or excess in the clinical lab diagnosis of metabolic diseases

PAPER II BAKERY AND PACKAGING

The students will be able to:

- Gain knowledge about various packaging materials and importance of packaging.
- Ensure the safety of the product and preserve it in good condition for the anticipated shelflife.
- Understand the importance of food labeling.
- Gain knowledge on food processing techniques.
- Gain knowledge on food processing techniques.
- To be more self-reliant.
- Equip the students to gain basic knowledge relating to the principles of baking
- Introduce them to the techniques of cake and pastry making
- Understand to describe properties and functions of the basic ingredients used in baked goods.
- Students will learn the Weigh and measure ingredients used in baking.
- Gain practical knowledge to prepare high ratio, chiffon cakes and genoise. washes, glazes, icings, frostings and fillings.
- Apply and examine the knowledge of properties for selection of packaging materials for food products
- Evaluate new and emerging technology and related underpinning science in food science in packaging
- Demonstrate advanced knowledge and skills in selecting packaging materials and technologies based on the characteristics of food product



and characteristics of packaging materials and storage and distribution of requirements

YEAR III

PAPER I NORMAL AND THERAPEUTIC NUTRITION

To enable students:

- To obtain knowledge on role of diet in disease conditions.
- To gain experience in planning, preparing and serving therapeutic diet.
- To learn and apply the latest in research-based nutrient needs of pregnant and lactating females.
- The student gains knowledge about the changing nutritional needs of an infant and about complementary feeding.
- The students will be able to relate nutrient needs to developmental stages and plan diets which will adequately meet nutritional needs during childhood.
- The student will learn the impact of growth and development in arriving at the nutritional needs of adolescents.
- The student will be able to connect the role of changing metabolism, risk of chronic diseases and impact of functional foods in effectively planning diets for adults.
- The student gains competence on meeting nutrition needs and establishing dietary patterns to promote optimum health and reducing the impact of chronic diseases in the elderly.

PAPER II-- ADVANCED BAKERY AND PACKAGING

- Equip the students to gain basic knowledge relating to the principles of baking
- Introduce them to the techniques of cake and pastry making
- Understand to describe properties and functions of the basic ingredients used in baked goods.
- Students will learn the Weigh and measure ingredients used in baking.
- Gain practical knowledge to prepare high ratio, chiffon cakes and genoise. washes, glazes, icings, frostings and fillings.
- Apply and examine the knowledge of properties for selection of packaging materials for foods food products
- Evaluate new and emerging technology and related underpinning science in food science in packaging
- Demonstrate advanced knowledge and skills in selecting packaging materials and technologies based on the characteristics of food product and characteristics of packaging materials and storage and distribution of requirements.



B.Sc. (Home Science) Textile and Clothing Program Specific Outcomes:

COURSE OUTCOMES

YEAR-I

Paper – Introduction to Textile and Clothing	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Develop basic concepts related to processing and production of fibers, yarns and textiles. ➤ Classify yarns and spinning methods. ➤ Evaluate the properties and performance of fibers, textiles and textile products. ➤ Explain the methods of application of finishes on different textile substrates, develop understanding of the chemistry and mechanism of action of application of various finishes. ➤ Explain various tools and equipments used in garment construction. ➤ Measure and record measure accurately. ➤ Explain various factors influencing selection of fabrics. ➤ Describe principles of clothing construction, drafting, paper pattern. ➤ Discuss principles of Tailoring develop skill for various sewing techniques basic and decorative stitches.
Paper I Fundamental Of Design	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Define design, concept and types of design. ➤ Distinguish between Motif and Pattern. ➤ Describe inspiration of design. ➤ Develop understanding of elements of design (Lines, Shapes, Spaces, forms, Colour & Texture). ➤ Develop understanding of principles of design (Rhythm, Harmony, Emphasis, Balance and proportion) ➤ Analyze the effective use of elements and design, and fashion in the design.
Paper II Fundamental Of Clothing Construction	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Identify various sewing tools and equipments. ➤ Demonstrate various sewing machines used for sewing. ➤ Develop skills required for garments components. ➤ Create different types of seams and seams finishes. ➤ Create different basic and decorative stitches. ➤ Develop skills of creating different sleeves, collars, pockets and yokes, explain the styling features of different collars, sleeves, pockets & necklines. ➤ Acquire the skills of finishing the necklines. ➤ Develop skills of taking body measurements.



YEAR-II

Paper I –

Fashion Illustrations

After completing the course the student will be able to :

- Develop skills to use different mediums – pencils & pens, brushes and papers, inks and colours (water, poster, oil and acrylic colours).
- Explain basic anatomical relationships relevant to descriptive drawing of the human form. Develop skills in figure drawings.
- Draw fashion figures by understanding body proportions.
- Identify rhythms of the body and natural forms and how they exist in the whole and part of the figure.
- Transfer the complete idea of their design onto the fashion figure.
- Describe different materials, their properties and use of them in making accessories.
- Identify different types of bags & purses.
- Describe various modern and traditional jewellery.
- Explain different skin adornment techniques.
- Evaluate the present trends in the market and interpret it and create own concepts.
- Define and describe fashion, concepts and characteristics.
- Explain fashion cycles and fashion theories.
- Identify role of fashion designer.
- Explain fashion forecasting.

Paper II – Clothing Construction

After completing the course the student will be able to :

- Define paper pattern, commercial paper pattern, pattern marking terms, pattern envelopes and guide sheet.
- Describe various methods of pattern designing.
- Develop and create style in the pattern through flat pattern technique pivot, slash and spread method.
- Alter various patterns and create new styles.
- Outline the different pattern adaptation techniques used to fit the different figure shapes and garment sizes.
- Will be able to create a clothing line.
- Develop skill in various types of regional embroideries and use them effectively and designing the garments.
- Develop a skill to create contemporary styles of embroideries for fashion garments.
- Create different surface ornamentation techniques eg. Various types of printing, tie and dye.



<p>PAPER</p> <p>TEXTILE AND CLOTHING</p>	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Develop understanding of methods of fabric construction. ➤ Differentiate the different weaving mechanism and about various weaving machines. ➤ Identify various weaving techniques. ➤ Classify dyes and outline various dyeing methods. ➤ Explain various printing techniques. ➤ Describe preparatory process of dyeing and printing. ➤ Explain different traditional textiles of India. ➤ Analyze the importance of clothing. ➤ Evaluate desirable features of infant's, children's clothing and social and psychological aspect of clothing. ➤ Assess the factors to be considered while selecting and making children's clothes. ➤ Plan family clothing budget. ➤ Prepare child's bodice block.
<p>YEAR-III</p>	
<p>PAPER</p> <p>APPAREL DESIGNING</p>	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Apply the knowledge of elements of design and principles of designs to create new design on paper, textile and garments. ➤ Identify the importance of clothing care and storage. ➤ Evaluate and compare readymade and tailormade garments. ➤ Explain the principles of figure drawing, silhouette and its types. ➤ Demonstrate various figure types. ➤ Analyze garment fit, fitting sessions, fitting problems and their remedies. ➤ Develop understanding of application of garment details in apparel construction. ➤ Develop understanding of drafting and layout for women's wear.
<p>Paper I –</p> <p>Fashion Illustrations</p>	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Describe the economic importance of fashion industry. ➤ Demonstrate the careers in the fashion industry, careers with each field of fashion. ➤ Describe the roles and importance of various fashion personnel within the fashion industry. ➤ Create and develop mood board and illustrations to make project. ➤ Identify various presentation technique eg. Swatch board, client board, wood board, accessory board. ➤ Distinguish the different styles in illustrations and mood boards. ➤ Develop cost sheet. ➤ Develop own illustrations style eg. Formal wear, casual wear & festive



	<p>wear etc.</p> <ul style="list-style-type: none"> ➤ Develop own illustrations style for old person, disabled person etc. ➤ Explain computer aided software (photoshop & coral draw) ➤ Identify various tools of computer aided software. ➤ Create their own presentation, and demonstrate their own brand through thematic window display. ➤ Can create female croquie, party wear, formal wear, casual wear & sport wear by using corel draw and photoshop. ➤ Create port folio
Paper II – Apparel Designing	<p>After completing the course the student will be able to :</p> <ul style="list-style-type: none"> ➤ Develop skills of drafting and stitching of women's wear (shirt, blouse, churidar, salwar plazzo, kurta, skirt, nightwear) ➤ Develop skill of drafting of skirt, shirt, Trousers & Koti. ➤ Identify woven dyes, printed and painted textiles of India. ➤ Explain different motives colours and weaving techniques used in Indian textiles along with its significance. ➤ Describe various techniques, stitches, motifs and colour combination used in Indian traditional embroidery. ➤ Different textiles from different parts of the country.



Faculty of Science

B.Sc.(Bachelor of Science)

Program Outcomes

Bachelor of Science (B.Sc.) offers theoretical as well as practical knowledge about different subject areas. These subject areas include Physics, Chemistry, Mathematics and Biology and other fields depending on the specialisation a student opts.

This programme course is most beneficial for students who have a strong interest and background in Science and Mathematics. The course is also beneficial for students who wish to pursue multi and inter-disciplinary science careers in future. Following are the various programme outcomes:

- This course forms the basis of science and comprises of the subjects like physics, chemistry, biology, zoology, mathematics and computer application.
- It helps to develop scientific temper and thus can prove to be very beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace.
- After the completion of this course students have the option to go for higher studies i.e., M. Sc and then do some research for the welfare of mankind.
- After higher studies students can join as scientist and can even look for professional job-oriented courses.
- This course also offers opportunities for serving in Indian Army, Indian Navy, Indian Air Force as officers.
- Students after this course have the option to join Indian Civil Services as IAS, IIS etc.
- Science graduates can go to serve in industries or may opt for establishing their own industrial unit.
- After the completion of the B.Sc. degree there are various other options available for the science students. Often, in some reputed universities or colleges in India and abroad the students are recruited directly by big MNC's after their completion of the course.
- Apart from the research jobs, students can also work or get jobs in Marketing, Business & Other technical fields. Science graduates also recruited in the bank sector to work as customer service executives. Students can also find employment in government sectors.



B.Sc. (Botany)

Program Specific Outcomes

Students completing this course will be able to-

- ❖ Critically evaluate the relevant information about the plants and their classification;
- ❖ B.Sc. Botany graduates develop the core competency in the subject and their theoretical and practical applicability is ensured;
- ❖ Botany graduates are equipped with the knowledge related to competitive exams;
- ❖ Students will be able to demonstrate the experimental techniques and methods of their area of specialization in Botany;
- ❖ Apart from subject specific skills, the outcomes would lead to gain knowledge and skills for further higher studies.

COURSE OUTCOMES

YEAR-I

PAPER I: Applied Botany	By the end of this course the student should have: <ul style="list-style-type: none"> ➤ Understood the significance and role of botany. ➤ Learnt the basic aspects of applied botany. ➤ Gained knowledge about employment opportunities in field of botany ➤ Gained knowledge about start-up opportunities in the field of botany ➤ Learnt about opportunities of social services ➤ Gain knowledge about best health practices
Practical I: Applied Botany Practical	<ul style="list-style-type: none"> ➤ On completion of this course, learners will be able to: ➤ By the end of this course the student should have knowledge of practical skill related with ethnobotany, tissue culture, application of bioinformatics software and tools of recombinant DNA technology.
Paper II: Basic Botany	<ul style="list-style-type: none"> ➤ This course will help the student to understand the diversity of plants and evolutionary process in plant kingdoms. ➤ It gives accounts of plant adaptation from aquatic condition to colonize terrestrial habitat. ➤ The changes in morphological, anatomical and reproductive structures that propel plant evolution can be investigated.



- The economic importance and significance of plants in nature will be understood.
- They will be acquainted with locally prevalent microbial diseases of plants and humans.

Practical II:

Basic Botany Practical

- Students will learn to carry out practical work in the laboratory.
- Interpreting plant morphology and anatomy of various groups of lower and higher plants.
- Students will be able to identify the major groups of microorganisms.

YEAR-II

PAPER I :

TAXONOMY AND EMBRYOLOGY OF ANGIOSPERMS

The objective of this course is to provide fundamental knowledge of plant taxonomy, reproduction and embryology of Angiosperms.

- Study of taxonomy helps the students to understand the flora of any area and make them able to identify the plant species;
- The above knowledge makes students competent to work in department of forestry, Biodiversity conservation board, Pollution control board, Environmental protection Agencies;
- Students will be more capable in the field of Horticulture floriculture Nursery management and plant cultivation;
- By the study of embryology of Angiosperms student will be able to understand plant and plant interaction, Pollination phenomena explains plant animal relationship which significant for maintenance of Ecological balances, modern techniques of Ecological balance, modern techniques of embryology helps in conservation of plant species;
- Students will be able to learn the seed and fruit formation phenomenon which helps in commercial use of seeds and fruits.

PAPER II:

PLANT ECOLOGY BIODIVERSITY PHYTOGEOGRAPHY

The objective of this course is to develop understanding about our environmental structure function conservation and its utilization;

- Students will be able to understand the structure of various ecosystem on the earth;
- Knowledge about ecological factors will be helpful to understand the pollution status and its control;
- The above knowledge makes students competent in the field of Pollution Control department. Environmental Protection Agencies;
- Students will be able to understand the biodiversity, plant animal relationship and



their role in ecological balance;

- They will be able to understand the pattern of vegetation in India and its significance for human society;
- They will be able to utilize the knowledge in the field of Eco Commercial development of our country.

YEAR-III

PAPER I:

PLANT PHYSIOLOGY AND BIOCHEMISTRY

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

- Understand water relation of plants with respect to various physiological processes;
- Explain role of plant nutrition;
- Recognize the functional importance of biomolecules in plants, their structure and classification;
- Interpret the biological nitrogen fixation, nitrogen and lipid metabolism;
- Explain the significance of photosynthesis and respiration;
- Understand the utility of enzymes and hormones in plant life.

PAPER II:

CELL BIOLOGY, GENETICS AND BIOTECHNOLOGY

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

- Identify the concept that explains the structure and function of cellwall, membrane and different cell organelles;
- Understand the chromosomal organization and its details and about the cell division process;
- Comprehend the effect of chromosomal abnormalities in numerical as well as structural changes leading to genetic disorders;
- Have conceptual understanding Mendelism and law of inheritance, gentic basis of alleles;
- Explain the concept of gene and transfer of genetic information;
- Understand the concept of plant breeding and its significance;
- Understand the core concepts and fundamentals of plant biotechnology and genetic engineering;
- Develop their competency on plant tissue culture;
- Refect upon various tools and techniques of recombinant DNA technology & DNA finger printing;
- Develop skills in data interpretation through Biostatistical methods.



B.Sc (Biotechnology) Programme specific outcomes

Programme specific outcomes (PSOs) - The successful completion of a Bachelor's degree in Biotechnology would enable students to-

- Think critically, analyze and solve problems within the scope of UG Biotechnology. The skill and the proficiency thus acquired to solve industry related problems would help students to lead a successful career in industry and research institutes;
- Understand the need and impact of biotechnological solutions on environment and societal context, keeping in view the need for sustainable solutions;
- **PLO 3** Be equipped with practical skills and the ability to apply their theoretical concepts to design, perform experiments, analyze and interpret data and thus develop proficiency in laboratory management;
- **PLO 4** Incline towards research through the compulsory internship in industry/research/academic institutes which promote and inculcate professional ethics and code of practice among students, enabling them to work in a team with a multidisciplinary approach.

Course Outcomes

Course Objective :- The Main Objective of the course will be to build the basic foundation for studying Biotechnology. The Demand For Trained workforce in Biotechnonology is ever growing in Fundamental Research and Industry Sector. Academic and Research Sectors also Require Interdisciplinary trained manpower to foster the Biotechnology Revolution. The restructured syllabus combines basic principles of Chemical and Biological sciences in light of advancements in technology. The curriculum aims to impart basic knowledge with emphasis on its applications to make the students ready for industries and research work in concerned field.

Year I

<p>Paper I :</p> <p>Cell Biology and Biochemistry</p>	<p>At the end of the paper a student should be able to:</p> <ul style="list-style-type: none"> ➤ Understand basics of cell biology ➤ Appreciate the importance of bonding and spatial arrangements of molecules for proper functioning and stability ➤ Understand both the physical as well as chemical properties or biomolecules ➤ The student could pursue a career in biochemical testing. The decrease of increase in the amount of some of the biomolecules can have clinical significance. ➤ Students can also go in for medical Laboratory Technique Courses. Opening opportunities in hospital and pathological laboratories.
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<p>Paper II :</p> <p>Microbiology and Immounology</p>	<p>Course Learning Outcome :- At the end of the Course student will familiar with -</p> <ul style="list-style-type: none"> ➤ Microbial diversity and nutrition. ➤ Immune system, its properties and types ➤ Immunoglobulin structure, types and functions and can apply the concept of hypersensitivity and vaccination for different diseases. ➤ Perform various immunological techniques
<p>Practical: I</p> <p>Labwork for Cell Biology and Biochemistry</p>	<p>At the end of the paper a student should be able to:</p> <ul style="list-style-type: none"> ➤ Understand basic techniques of cell biology ➤ Know the physical as well as chemical properties of biomolecules ➤ Pursue a career in biochemical testin. The decrease of increase in the amount of some of the biomolecules can have clinical significance. ➤ Take medical Laboratory Technique Courses, opening opportunities in hospitals and pathological laboratories.
<p>Paper II:</p> <p>Microbiology and Immunology</p>	<p>At the end of the Course student will familiar with -</p> <ul style="list-style-type: none"> ➤ Microbial diversity and nutrition. ➤ Immune system, its properties and types ➤ Immunoglobulin structure, types and functions and can apply the concept of hypersensitivity and vaccination for different diseases. ➤ Perform various immunological techniques.
<p>Year II</p>	
<p>Paper I : Biophysics and Biochemistry</p>	<ul style="list-style-type: none"> ➤ Students learn basic principles of thermodynamics and biophysical methods; ➤ They acquire a fairly broad knowledge of biochemistry as applicable to biotechnology; ➤ They gain basic knowledge of various biomolecules including DNA, RNA, Proteins and enzymes.
<p>Paper II :</p> <p>Bioinstrumentation,</p>	<ul style="list-style-type: none"> ➤ Students understand principles and applications of basic instruments including computer;



Biostatistics and Bioinformatics	<ul style="list-style-type: none"> ➤ They also acquire theoretical and applied knowledge of principles and applications of statistics ; ➤ They do get familiarity with various biological databases and learn to Access them and their applications.
Year III	
Paper I : Molecular Biology & Genetic engineering	<ul style="list-style-type: none"> ➤ The students learn to explain genome organization of prokaryotes and eukaryotes; ➤ They understand the mechanisms by which genetic materials maintain them and perform genetical functions; ➤ They acquire knowledge of principles of general and molecular genetics; ➤ They understand the steps involved in recombinant DNA technology;
Paper II : Applied Biotechnology	<ul style="list-style-type: none"> ➤ The students learn to explain genome organization of prokaryotes and eukaryotes; ➤ They understand the mechanisms by which genetic materials maintain them and perform genetical functions; ➤ They acquire knowledge of principles of general and molecular genetics; ➤ They understand the steps involved in recombinant DNA technology;



B.Sc. (Chemistry)- Program Specific Outcomes

- ❖ Students will be able to demonstrate and apply the fundamental knowledge of basic principles in various fields of chemistry.
- ❖ They can create awareness and sense of responsibilities towards environment and apply knowledge to solve the issues related to environmental pollution.
- ❖ Students will be able to build up small-scale industries for developing endogenous product.
- ❖ Students will be able to apply various aspects of chemistry of natural products' isolations, like: - pharmaceuticals, dyes, textiles, polymers, petroleum products, forensic etc. and also develop interdisciplinary approaches.
- ❖ They will be able to develop their critical reasoning, judgement & communication skills.
- ❖ Students will be able to augment the recent developments in field of green and eco-friendly reactions, pharmaceuticals, bioinorganic chemistry and relevant fields of research and development.
- ❖ They will be able to enhance scientific temper among students so as to develop a research culture and implementation of policies to tackle burning issues at global and local levels.

COURSE OUTCOMES

YEAR – I

PAPER (I) : PHYSICAL CHEMISTRY

The objective of this course is to provide exposure to students on mathematical concepts, state of compounds, chemical kinetics, radioactivity, nuclear chemistry and chemical equilibrium.

- Students will be able to evaluate differentiation, integration, logarithmic relation curves, sketching maxima and minima.
- Students will be able to compare critical constants and van der Waals constants and critical phenomenon.
- Students will be able to discuss the classification, structure of pneumatic and cholesteric phases.
- Students will be able to demonstrate the laws of symmetry, ionic solid structure, limitations of radius rule & lattice defects.
- Students will be able to analyse chemical kinetics and its scope.
- Students will be able to explain zero order reaction, first order reaction, effect of temperature on rate of reaction, Arrhenius equation & collision theory.



- They will be able to discuss natural and artificial radioactivity-detection and measurement.
- Student will be able to identify isotopes, isobar and application of radiochemistry.
- They will be able to explain law of mass action, equilibrium constant, Hardy-Schulze rule, gold numbers and application of colloids.
- Student will be able to discuss coagulation, emulsion gels and sols.

**PAPER (II) :
INORGANIC
CHEMISTRY**

The objective of this course is to provide information about atomic structure, periodic properties, chemical bonding, chemistry of noble gases, s-block and p-block elements, dual nature of matter, De-Broglie matter waves, Heisenberg uncertainty principle, atomic orbitals, Schrodinger wave equation, quantum numbers, Aufbau and Pauli exclusion principles and Hund's multiplicity rule.

- Student will be able to discuss ionization energy, electron affinity, application in predicting and explaining the chemical behaviour.
- They will be able to explain covalent bond valence theory VSEPR theory bond strength, bond energy and various types of hydrogen.
- Student will be able to outline the solid ionic structure limitation of radius ratio rule, Fajan's rule, metallic bond, free electron, valence bond and bond theories.
- They will be able to discuss chemical properties of noble gases.
- Student will be able to explain diagonal relationship, features of hydrides and introduction of alkyls and aryls.
- They will be able to analyse allied of group 13-16 and 13-17 elements.
- Student will be able to explain hydrides of Boron, di-Boron, and higher Borons, Fluoro-carbon, Silicates, Interhalogens.



**PAPER (III) :
ORGANIC
CHEMISTRY**

The objective of this course is to provide exposure to students on structure and bonding, mechanism of organic reaction, alkanes, cycloalkanes, alkenes, dienes, alkynes, alkyl halides and stereochemistry of organic compounds.

- Student will be able to discuss hybridization, bond angles, delocalised chemical bond, inclusion compounds, clathrates, charge transfer complexes, hyperconjugation, electrometric, mesomeric and steric effect.
- Students will be able to demonstrate reactive intermediates, carbocations, free radicals, carbenes & carbanions.
- They will be able to evaluate the types of organic reaction, homolytic and heterolytic bond fission.
- Student will be able to explain nomenclature, formation, isomerism, Kolbe reaction, Bayer strain theory Saytzeff rule, electrophilic and free radical additions, Markownikoff's rule, epoxidation & ozonolysis.
- They will be able to demonstrate the nomenclature and classification of dienes, structure of allenes and butadiene.
- Student will be able to analyse mechanism of nucleophilic substitution of alkyl halides, methods of preparation, properties of chloroform and carbon tetrachloride.
- They will be able to identify optical isomerism, molecular chirality, a enantiomers & stereogenic centre.
- Students will be able to outline the E and Z system of nomenclature, geometrical isomerism of oximes and alicyclic compounds.
- They will be able to analyse the meso
- compounds, inversion, retention and racemization.

YEAR – II

**PAPER (I) : PHYSICAL
CHEMISTRY**

The objective of this course is to provide exposure to students on thermodynamics, thermo-chemistry, phase equilibrium, electrochemistry, buffers, surface chemistry & catalysis.

- Students will be able to explain basic concepts of thermodynamics, Carnot cycle, entropy, Gibb's function(G) and Helmholtz function(H).
- They will be able to evaluate the law of heat summation and enthalpy of neutralization.



- Students will be able to discuss the phase components, degree of freedom, one component system, Gibbs Phase rule.
- They will be able to apply ideal liquid mixtures, Raoult law, Henry law and ethanol water system.
- They will be able to explain immiscible liquids steam distillation, Nernst distribution law, thermodynamic derivation and its application.
- Students will be able to demonstrate electrical transport, conduction in metals and electrolyte solutions, effect of dilution on conductivity, Arrhenius theory of electrolyte dissociation & OHO theory.
- They will be able to discuss standard hydrogen electrode & reference electrodes.
- Students will be able to explain PH and pk and glass electrode by potentiometric methods.
- They will be able to analyse the mechanism of buffer action, Henderson Hazel quation and hydrolysis of salts.
- Students will be able to discuss absorption, adsorption and their types, Langmuir adsorption and determination of surface area.
- They will be able to predict the catalysed reaction & application of catalyst.

Paper (II):
Inorganic Chemistry

The objective of this course is to provide information about chemistry of elements of first, second and third transition series, coordination compounds, chemistry of Lanthanide and actinide elements and acid and base.

- Student will be able to discuss characteristic properties of D block elements.
- They will be able to explain properties of carbides, oxides and sulphides.
- Students will be able to identify oxidation state, magnetic behavior a spectral properties.
- They will be able to evaluate Werner coordination theory, effective atomic number concept, chelates & valence bond theory of transition metal complexes.
- Students will be able to analyse redox cycle, redox stability in water, Frost Latimer and Pourbaix diagram.
- They will be able to explain features, separation and chemistry of lanthanides and actinides.



Paper (III): Organic Chemistry

- Students will be able to discuss Arrhenius, Bronsted Lowry Lux-Flood, solvent system and Lewis concepts of acids and bases.

The objective of this course is to provide exposure to students on electromagnetic spectrum, alcohols, phenols, aldehydes, ketones, carbocyclic acid ether and organic compounds of nitrogen.

- Students will be able to discuss Beer Lambert law, molar absorptivity & analysis of UV spectra.
- They will be able to analyse concept of chromophore and auxochrome & bathochromic, hyperchromic and hypochromic shifts.
- Students will be able to explain IR absorption, position of IR bands, fingerprint region and interpretation of IR spectra of simple organic compounds.
- They will be able to explain monohydric alcohols, nomenclature, methods of formation, reduction of aldehydes, ketones, carboxylic acids and esters.
- Students will be able to prepare phenols, mechanism of Fries' rearrangement, Claisen rearrangement, Gattermann synthesis and Reimer-Teimer reaction.
- They will be able to explain structure of carbonyl group.
- Students will be able to explain predict Witting and Mannich reaction.
- They will be able to explain oxidation of aldehydes, Beyer- Villiger oxidation of ketones.
- Students will be able to discuss nomenclature, structure and bonding of carboxylic acids, mechanism of decarboxylation, methods of formation and effect of heat and dehydrating agents.
- They will be able to analyse reactivity structure and nomenclature of amines & stereochemistry of amines.
- Students will be able to discuss Primary, secondary and tertiary amines.
- They will be able to explain amine salt as phase transfer catalyst.
- Students will be able to demonstrate Gabriel- Phthalimide reaction, Hoffman-bromamide reactions & synthetic transformation of aryl diazonium salts.

YEAR – III



PAPER (I): INORGANIC CHEMISTRY

The objective of this course is to provide exposure to students on HSAB theories, metal ligand bonding in transition metal complexes, magnetic properties, organometallic chemistry, bioinorganic chemistry, silicon and phosphazenes.

- Students will be able to discuss Pearson's HSAB concept, symbiosis basis of hardness and softness.
- They will be able to analyse metal ligand bonding in transition metal complex.
- Students will be able to explain magnetic properties of transition metal complex.
- They will be able to demonstrate Kinetic aspects of metal complex.
- Students will be able to discuss organometallic compounds of Li, Al, Hg, Sn.
- They will be able to explain role of essential and trace elements in biological processes and biological role of alkali and alkaline earth metal ions with special reference to Ca^{2+} and nitrogen fixation.
- Students will be able to analyse silicones and phosphazenes as example of inorganic polymers and nature of bonding in triphosphazenes.

PAPER (II): ORGANIC CHEMISTRY

The objective of this course is to provide information about spectroscopy, organo sulphur, heterocyclic compounds, carbohydrates, amino acids, peptides, proteins and nucleic acids, fats, oils and detergents, synthetic polymers and synthetic dyes

- Students will be able to discuss NMR spectroscopy, shielding and deshielding effect, chemical shift and interpretation of PMR spectra of simple organic molecules.
- They will be able to explain formation and chemical reactions of organozinc and organolithium compounds.
- Students will be able to analyse the molecular orbital picture and aromatic characteristics of pyrrole, furon, thiophene and pyridine.
- They will be able to explain five and six membered heterocycles & Bischler-Napieralski synthesis.
- Students will be able to discuss classification and nomenclature of carbohydrates glucose & fructose.
- They will be able to explain erythro, threo diastereomers and structure of ribose and deoxyribose.



- Students will be able to design the structure of acid base behaviour of amino acids, peptides, proteins.
- They will be able to evaluate isoelectric point and electrophoresis.
- Students will be able to demonstrate natural fats, edible and industrial oil of vegetable origin.
- They will be able to discuss saponification value, Iodine value & hydrogenation of unsaturated oils.
- Students will be able to explain addition or chain growth polymerization, Ziegler-Natta polymerization and vinyl polymers.
- They will be able to discuss colour and constitution of dyes, chemistry and synthesis of methyl orange, congo red, malachite green, alizarin and indigo.

**PAPER III:
Physical Chemistry**

The objective of this course is to provide exposure to students on elementary quantum mechanics, rotational spectrum, vibrational spectrum, electronic spectrum, photochemistry, physical properties and molecular structure.

- Students will be able to discuss black body radiation, Planck's radiation law, photoelectric effect, heat capacity of solids & Bohr's model of hydrogen atom.
- They will be able to evaluate De-Broglie hypothesis, sinusoidal wave equation, Hamiltonian operator & Schrodinger wave equation.
- Students will be able to discuss postulates of quantum mechanics & particle in a one-dimensional box.
- They will be able to evaluate the energy levels from wave function and calculate coefficient of AO used in hybrid orbitals.
- Students will be able to compare M.O and V.B models.
- Students will be able to explain physical picture of bonding and antibonding wave function.
- They will be able to evaluate energy level of rigid rotation.
- Students will be able to discuss Maxwell Boltzmann distribution, spectral intensity and isotope effect.
- They will be able to explain energy levels of simple harmonic oscillator, determination of force constants effect of a harmonic motion.
- Students will be able to analyse Franck Condon principle & Raman spectra of diatomic molecules.



- They will be able to outline the Jablonski diagram and photosensitized reaction-energy transfer process.
- Students will be able to discuss Grotthus-Draper law, Stark- Einstein law, fluorescence, phosphorescence & non- radioactive process.
- They will be able to explain optical activity, dipole moment, magnetic properties paramagnetism, diamagnetism and ferromagnetism.
- Students will be able to analyse the concept of polarizability and pure rotational Raman spectra of diatomic molecules.



B.Sc. (Mathematics)- Program Specific Outcome

- ❖ Students will be able to identify, analyze and solve the problems.
- ❖ Students can get the jobs in school education, Banking sector, Insurance sector, Data operator, Railways staff selection, RRB, Defence services, Post office services.
- ❖ They can pursue Higher Education (M.Sc. Mathematics)
- ❖ Students will be able to interpret Data and they understand the wider use of mathematics to solve the pandemic situation like COVID-19

COURSE OUTCOMES

YEAR-I

Paper : I Algebra, Vector Analysis and Geometry	<p>The Course will enable the Students to-</p> <ul style="list-style-type: none"> ➤ Recognize Consistent and Inconsistent systems of linear equations by the row echelon form of the Augmented Matrix using the rank of matrix ➤ To find the Eigen values and corresponding Eigen vectors for a square matrix ➤ Using the knowledge of vector calculus in geometry. ➤ Enhance the knowledge of three dimensional geometrical figures (eg. Cone and cylinder).
Paper : II Calculus and Differential Equations	<p>The course will enable the students to-</p> <ul style="list-style-type: none"> ➤ Sketch curves in a plane using its Mathematical properties in the different coordinate systems of reference. ➤ Using the derivatives in Optimization social sciences, Physics and Life sciences etc. ➤ Formulate the differential Equation for various Mathematical models.
Paper : elective I Matrices, Geometry and Vector Algebra	<p>Student will be able to use the Matrices, Determinants, Geometry and Vector approach in different areas of business and science like Budgeting, Sales projection, cost estimation, analysing the result of an Experiment etc.</p>
Paper elective 2	<p>At the end of this course, the Students will be able to;</p> <ul style="list-style-type: none"> ➤ Using the Principles of logic to distinguish between sound and unsound reasoning in discourse of every body.



- Construct truth tables for logical expressions, test statements for logical equivalence and represent Mathematical statements in the language of predicate language.
- Using the appropriate set theoretic concepts thinking process, tools and techniques in the solution to various conceptual or real-world problems.

YEAR-II

Paper : I Abstract Algebra Mathematics

The objective of this course is to help all the students to develop a positive attitude.

- Group theory and applications of Group, Subgroups, Cyclic groups and its properties.
- Have a deeper understanding of Lagrange's theorem Fermat's theorem. Normal subgroups and Quotient groups.
- Have a solid knowledge of Homomorphism, Isomorphism of groups, Fundamental theorem of homomorphism, Caley's theorem.
- Students will be enable to developing important skills in problem solving techniques of Rings, Subrings, Ideal, Integral domain and Field.
- Students will be enable to stimulate interest in learning of Group Automorphism, Cauchy's theorem and Conjugacy relation.

Paper : II Advanced Calculus Mathematics

In this course students will be enable to :

- Analyzing and describing the behaviour of sequences, limit. Cauchy's theorem, Tests of Convergence.
- Students have a deeper understanding of Continuity, Mean value theorems and Darboux's value theorem.
- Students have a solid knowledge of partial differentiation, Euler's Taylor's theorem for function of two variables and Jacobians.
- Students will be enable to developing important skill in problem solving method of Envelops, Evolutes, Maxima and Minima, Beta and Gamma Function.
- Students will be enable to stimulate interest in learning of Double and triple integrals, volume and surface, change of order of integration.



**Paper : II
Differential
Equations
Mathematics**

In this course students will be enable to :

- Analyzing and describing the behavior of series solution, power series method, Bessel's, Legendre's equations and functions and their properties, Recurrence relations.
- Students have a deeper understanding of Laplace Transformation and its properties, shifting theorems, differentiation and integration of transforms.
- Students have a solid knowledge of inverse Laplace transform, convolution theorem, applications, initial value problem.
- Students will be enable to developing important skills in problem solving of second order partial differential equation, Higher order partial differential equations, homogeneous and non homogenous equations , heat equation, laplace equation and equation of vibrating string.
- Students will be enable to stimulate interest in learning of partial differential equation of Ist order, Lagrange's solution, general method, charpit's general method.

YEAR-III

**Paper : I
Linear Algebra and
Numerical Analysis**

The objective of this course is to provide understanding of vector space, Quotient space, Rank-Nullity Theorem and wide aspects of Numerical Analysis in which solution of equations, Interpolation and direct methods for solving systems of linear equations have been included.

- Students will be able to define and give examples of vector spaces, sub-spaces, Linear span, Linear dependence and independence, Basis, Dimensions etc.
- They will have the knowledge of linear transformation, inner product spaces, Quotient spaces, Cauchy-Schwartz inequality orthogonal and orthonormal sets.
- Students will learn to find Eigen values and Eigen vectors of a matrix which is used in the study of chemical reactions and geometry.
- They will be able to solve problems by using Regula-Falsi, Secant, Newton's methods and also will be able to find Interpolation and Numerical Quadrature.
- Students would be able to solve system of linear equations by Elimination method, and ordinary differential equations by Euler's method, Runge-Kutta method, Milin-Simpson method.



Paper : II Real and Complex Analysis	<p>The objective of this paper / course is to provide deep knowledge and understanding of Real and complex analysis.</p> <ul style="list-style-type: none"> ➤ Students will be able to define Riemann-Integral, Its properties, Improper Integrals, Its convergence, Fourier series, Frullani's Integra. ➤ They will be able to prove mean-value theorem, Schwartz's and Young's theorem. Cantor's intersection theorem, Baire's category theorem. ➤ Students will be able to define metric spaces, neighbourhoods, limit point, interior point, open and closed sets, uniform continuity, compactness, sequential compactness, connectedness etc. ➤ Students will have the knowledge of complex numbers, Analytic functions, Harmonic functions, Fixed points, cross ratio and conformal mappings.
Paper : III Discrete Mathematics (optional)	<p>The objective of this paper is to understand the topics of Discrete mathematics in which Boolean functions, lattice and types of it are included students will be able to make graphs and circuits.</p> <ul style="list-style-type: none"> ➤ Students will be able to define and identify various types of relations like binary relation, Inverse relation, composite and equivalence relation. ➤ They would be able to differentiate among various types of sets like partially and totally ordered sets and lattices like dual and bounded lattice etc. ➤ The students will be able to draw various graphs and circuits and would be able to find shortest paths. ➤ Students would be able to state various properties of tree, rooted tree, binary tree, they will be able to find Rank and Nullity of Graph. ➤ They would be able to write the algorithm, Kruskal's algorithm and prime algorithm



B.Sc. (Physics) Program Specific Outcome

COURSE OUTCOMES

YEAR-I

(Paper 1) Thermodynamics and Statistical Physics

- The Students would gain practical knowledge about heat and radiation by performing various experiments.
- The students' will acquire knowledge about the different forms of distribution of subatomic particles in the system using statistical mechanics .
- The student will be able to use various thermodynamic instruments in daily life.

(Paper 2) Mechanics and General Properties of Matter

- The course would empower the students to develop the idea about the behavior of physical systems (bodies).
- It will provide the basic concepts related to the motion of all the objectives around us in daily life.
- The students would be able to build foundation to various applied field in science and technology (specially in the field of mechanical engineering).
- The students will acquire the knowledge of basic mathematical methods to solve the various problems in physics.
- The students will be able to understand the relativistic effect and the relation between energy and mass.

(Elective) Non-Conventional Energy Sources

- A good understanding of various non-conventional energy sources.
- Knowledge about non-conventional energy harvesting Technology.
- The knowledge about the availability of non-conventional energy resources in India.
- A good understanding of the solar energy and the appliances based on solar energy.
- A non-conventional energy harvesting technical skill that will be helpful for employment.



**Practical
Mechanics and
General Properties
of Matter**

- The Students would acquire basic practical knowledge related to mechanics through the experiments.
- Students will be familiar with various measurement devices by which they can measure various physical quantities with accuracy.
- The student will develop the concept related to the mechanics and properties of matter.

YEAR-II

Paper I : OPTICS

On successful completion of this course students will gain knowledge on various theories of light.

- Acquire skills to identify and apply formulas of optics and wave physics.
- Understand phenomenon of Optics like- Interference in working of Interference, Diffraction, Polarisation and their application.
- Application of interference in Working of Interferometer.
- Application of diffraction will give concept of Resolving Power of optical instruments.
- learn basic mechanism of Laser action and understand how real world. LASER operates and their types and properties.
- Gain knowledge in Holography optical fiber and application in communication.
- Geometrical option provides basic tool in understanding optical system in image information, lens combination and aberration in optical instruments.

**Paper II:-
Electro statistics,
Magnetostatics and
Electrodynamics**

This course develops concepts of electric field and scalar potential, magnetic field and vector potential. It provides Knowledge based on fundamental concepts of charge, field and their interaction with matter. Course learning' outcome is to

- Define various electric feild in elect statistics, magneto statics, and electrodynamics .
- Explain propagation of electromagnetic wave and apply Maxwells equation to solution of problems related to wave propagation which forms base to modern PLASMA physics.
- To learn the Principle, construction and operation of important and basic electronic device CRO to measure frequency and voltage.

YEAR-III



**Paper I :
Quantum Mechanics
and Spectroscopy**

- Understand the central concept of Quantum Mechanics with the historical development, operators and Schrodinger Equation helping to decipher the inadequacies of Classical Mechanics,
- Spectroscopy is an integral part of the curriculum that benefits students in elucidation of structure of certain complex molecules.
- Understanding the properties of Nuclei, Nuclear Forces and different nuclear models would help students to interpret basic problems in Nuclear Physics.

**Paper II:
Solid State Physics &
Electronic Devices**

- A brief idea about crystalline and amorphous substances and knowledge of lattice vibrations is a part of the curriculum.
- The understanding of insulators, conductors and semi-conductors also helps the student to comprehend the elementary band theory.
- Nano materials have significant commercial impact today and their study in this paper would enrich the student in the area of nano technology.



B.Sc. (Zoology) Program Specific Outcome

COURSE OUTCOMES

YEAR-I

Paper I Animal Diversity : Non-Chordata

Completion of the course students should be able to -

- Learn about the importance of systemic, taxonomy and phylogeny to get a concrete idea of evolution of non-chordate phyla.
- Understand the various morphological, anatomical structures and functions of animals of different phyla.
- Get the knowledge about economic, ecological and medicinal significance of various animal in human welfare.
- Understand the important parasites and their control measures.

Paper II Cell Biology Reproductive Biology and Developmental Biology

After Completion of the course students should be able to -

- Develop deeper understanding of what life is and how it functions at cellular level.
- Understand the nature and basic concepts of Cell biology, Reproductive and Developmental biology.
- Understand structure and functions of cell membrane and cellular organelles.
- Understand the importance of latest reproductive trends, reproductive techniques to be applied for human welfare.
- Understand the general patterns and sequential development stages during embryogenesis; and understand how the developmental processes lead to establishment of body plan of multi-cellular organisms.
- Understand about the evolutionary development of various animals.

SEMESTER-II

Paper I – Vertebrate and Evolution

- Imparts conceptual knowledge of Vertebrates, their adaptation and association in relation to their environment.
- Classify phylum protochordates to mammalia.
- Complex vertebrate interactions.
- Basic concepts of developmental biology.
- Gains Knowledge about comparative account of various Organsystem in all vertebrates.



**Paper II –
Animal Physiology
and bio chemistry**

- Seeks to understand the interactions and interdependent of physiological and bio chemical processes.
- Students are taught the detailed concepts of digestion, respiration, excretion, the functioning of nerves and muscles.
- Students will gain skill to execute the roles of a biology teacher or medical lab technicians with training as they have basic fundamentals.
- Students learn the concepts of endocrine systems and homeostasis mechanism of enzymes.

YEAR-III

**Paper I
Genetics**

- Gains Knowledge about heredity and genetic material.
- Mendalism and non non-Mendalian inheritance.
- Concept behind genetic disorder, gene mutation-various causes associated with in born errors of metabolism.
- Gains Knowledge about DNA finger printing, gene cloning, gene therapy

**Paper II
Ecology and applied
Zoology**

- Seeks knowledge in the areas of response to laws of limiting factors, laws of tolerance and tragedy of commons.
- Gains knowledge about population Characteristics and dynamics-conceptual approach.
- Types of ecosystems examples – fresh water, marine, terrestrial.
- Growth curves and pyramids, sigmoid, J curve & hyperbola, logistic equations & concepts relating to growth.
- Imparts knowledge to the students regarding environment & conservation biology.
- Understands concepts of fisheries, fishing tools & site selection. aqua culture & applied entomology.
- Role of insects in spread of diseases. Imparts knowledge of beneficial & non-beneficial insects.
- Gives knowledge about silk, silk worm, diseases, mulberry cultivation & various process involved in silk production also gain knowledge of lac culture, common pests.
- Students, after completing course can help farmers for good cultivation methods.



Ability Enhancement Course

COURSE OUTCOMES-

Year I	
Foundation Course-1 PAPER I हिन्दी भाषा और संस्कृति	<ul style="list-style-type: none"> ➤ उत्कृष्ट साहित्यिक पाठों के अध्ययन से रूचि का विकास होगा। ➤ सांस्कृतिक चेतना और राष्ट्रीय भावना का विकास होगा। ➤ भाषा ज्ञान का विकास होगा। ➤ सामान्य शब्दावली और विशेष शब्दावली के अध्ययन द्वारा भाषा एवं संस्कृति बोध का विकास होगा। ➤ विशिष्ट शब्दावली (बीज शब्द/की वर्ड) से परिचित करवाते हुए बोध के स्तर को विकसित करना। ➤ प्रतियोगी परीक्षाओं हेतु विद्यार्थियों को तैयार करना।
Foundation Course-1 PAPER II ENGLISH LANGUAGE AND INDIAN CULTURE	<ul style="list-style-type: none"> ➤ Prepare for various competitive exam by developing their english language competence. ➤ Promote their comprehension skills by being exposed to a variety of texts and their vocabulary. ➤ Build the enhancement vocabulary. ➤ Develop their communication skills by strengthening grammar and usages. ➤ Inculcate values which makes them aware of national heritage and environmental issues, making them responsible citizens.
Foundation Course-2 PAPER I ENVIRONMENTAL EDUCATION	<ul style="list-style-type: none"> ➤ To understand various aspects of life forms, ecological processes, and the impacts on them by the human during Anthropocene era. ➤ To build capabilities to identify relevant environmental issues, analyze the various underlying causes, evaluate the practices and policies, and develop framework to make inform decisions. ➤ To develop empathy of all life forms awareness and responsibility towards environmental protection and nature preservation. ➤ To develop the critical thinking for shaping strategies such as scientific, social, economic, administrative and legal. Environmental protection, conservation of biodiversity, environmental equity and sustainable development. ➤ To prepare for the competitive exams.



Foundation Course-2 Paper IV Yoga and Meditation	<p>After studying this course, students will be able to take care of their own Physical Mental emotional, social and spiritual health.</p>
ELECTIVE NCC	<p>The students will develop a sense of responsibility and there by display sense of patriotism secular values discipline improve bearing and develop the faculty of immediate and implicit obedience of good things. This paper will enable the student to build and develop leadership through communication the significance relationship between personality traits and leadership will be achieved and executed.</p>

Vocational Course

B.A. Year I COURSE OUTCOMES-

TOURISM, TRANSPORT AND TRAVEL SERVICES	<p>After studying this Course, the Student will be able to</p> <ul style="list-style-type: none"> ➤ Understand the core concept of tourism, travel and transport service . ➤ Practically perform passport and visa formalities. ➤ Manage airport ground handlings. ➤ Independently escort the tourists group and guide these groups and individual tours also. ➤ Understand and practically know the procedure and functioning of travel agency.
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