M.COM

PROGRAMME OUTCOMES

- To inculcate the knowledge of all core areas specifically Financial Management, Financial Reporting and Accounting Standards, Research Methodology Management, Security Market Operations and Business Environment, Contemporary issues in accounts and Direct Tax planning and Goods and Service Tax(GST)
- To enable a student with conventional as well as contemporary areas in the discipline of Commerce.
- Pertain ethical principles and entrust to professional ethics and responsibilities.
- Communicate effectively on various activities and make effective presentations using ICT tools.
- To exhibit conceptual and understanding level of the programmes and apply them in a business and multidisciplinary environment.

PROGRAMME SPECIFIC OUTCOMES

After the completion of the M.Com Course, a student is able

- For pursuing to transform fundamental to advance level in commerce.
- Capable of opting career in teaching or non teaching as profession.
- For pursuing research in their interest area.

Course Outcomes

M.Com Semester-I

Outcome 1.1 : Marketing Management

The course is designed to provide the students with the basic knowledge of marketing concepts used by contemporary businesses in the modern world and to understand the differences in marketing strategies as dictated by products, customers, environment, etc.

Outcome 1.2 : Financial Management

The course aims to provide an understanding of various concepts of financial management and to develop skills amongst the students in designing appropriate financial strategies for business enterprises.

Outcome 1.3 : Organizational Behavior

The course is designed to develop conceptual and theoretical understanding of organizational theory and its basic elements amongst the students and in developing appropriate strategies for influencing individual behavior on group behavior and vice versa.

Outcome 1.4 : Strategic management

The course aims to provide conceptual knowledge of strategic management process in businesses and develop skills of analysis, implementation and evaluation of corporate level strategies amongst the students.

Outcome 1.5 : Security analysis and portfolio management

The course aims to provide conceptual understanding of the elements of investment process in securities and in developing skills of analysis and selection of appropriate securities for investment.

M.Com Semester-II

Outcome 2.1 : Financial Reporting and Accounting Standards

The course aims at providing an understanding of theoretical concepts of corporate financial reporting trends and to develop skills in interpretation of financial statements of global organizations.

Outcome 2.2 : Corporate Restructuring

The course is designed to equip students with the basic understanding of corporate mergers and to develop skills for valuation and integration of corporate mergers.

Outcome 2.3 : Business Research Methods

The course is designed to develop an understanding the quantitative research concepts and their application in business and equip students with necessary skills to apply research methods in business.

Outcome 2.4 : Strategic Human Resource Management

This course will help the students to think strategically and integrate the activities of HR with the organizations goals.

Outcome 2.5 :

The Course is designed to equip the students with an understanding concepts of economics relevant for managerial decision making and to develop skills in the application of those concepts.

M.Com Semester-III

Outcome 3.1 : Accounting Information System

The course is designed to provide an understanding of the basic concepts and techniques of accounting information system in business entities and to develop skills among the students of the application in business entities.

Outcome 3.2 : Multinational Business Finance

The course aims to provide an understanding of concepts and techniques of financial management of MNCs and to develop the skills of their applications in the management of financial operations and risks of MNCs.

Outcome 3.3 : Corporate Accounting

The course is designed to enable students to learn the techniques of accounting for and reporting of corporate entities' annual accounts and of specialize nature of financial activities and events.

Outcome 3.4 : Accounting for Specialised Institutions

The course is designed to provide conceptual knowledge regarding the accounting principles in specialized types of business enterprises and to impart skills for accounting and reporting of financial transactions in such enterprises.

Outcome 3.5 : Corporate Tax Planning

The course is designed to provide knowledge of direct tax laws and their application in tax planning of corporate entities and to develop skills of the applications of various provisions of direct tax laws in India

M.Com Semester-IV

Outcome 4.1 : Computer Applications in Business

The course is designed to develop among the students the basic conceptual and technical skills of IT as applied in various functional areas of the business entities.

Outcome 4.2 : Corporate Governance

The subject aims to provide basic understanding of evolution, concept, role and principles of corporate governance in the world and in India and to develop the knowledge of measuring the governance performance of entities.

Outcome 4.3: Strategic Cost Management

The course is designed to provide among the students an understanding of contemporary developments in the field of accounting and their application in resolving complex issues of financial reporting.

Outcome 4.4:

The course is designed to enable students to understand the basic concepts of GST Law introduced in India and to develop skills of computing GST and in filing all the returns involved under the GST.

Outcome 4.3: Project Report and *Viva Voce.*

The course is designed to enable students to understand research activity and also to encourage them to do the research in future.

B.COM

PROGRAMME OUTCOMES

- To inculcate the knowledge of all core areas specifically Business Environmental skills, Communication skills, Personal skills and Management skills.
- Analysis and interpretation of financial statements by using statistical and financial tools and drawing inferences.
- To enhance the Entrepreneurial and Employability skills.
- Preparation of financial statements/reports manual and computerized accounting system using Tally.
- To nurture the Tax Planning, Assessment and Tax Filing.
- Human Resource Concept, Planning, Management and Development.

PROGRAMME SPECIFIC OUTCOMES

- Enhance the students' ability to apply management principles and functions to tackle the problems relating to both physical and human resources.
- The skills to take right decision in financing, investing and dividend to achieve predetermined objectives.
- Students understand theoretical concepts and practical approach of application of various laws relating to formation, management and smooth functioning of business organizations.

COURSE OUTCOMES

B.Com I Semester

Outcome 1.1: Financial Accounting – I

The objectives of this paper are to provide higher knowledge and exposure in the application of financial accounting principles and methods to various forms of business organizations.

Outcome 1.1: Principles of Management

The objectives are to acquaint students with the concepts, principles and practices of the management of business organizations.

Outcome 1.3: Business Environment

To enable students to understand and identify the environment within which the business organizations function and the influence of environmental factors.

B.Com II Semester

Outcome 2.1 Financial Accounting – II

The objectives of this course are to provide higher knowledge and exposure in the application of financial accounting principles and methods to various forms of business organizations.

Outcome 2.2 Business Communication Skills

To familiarize the students with the concepts of business communication and to develop basic business communication skills

Outcome 2.3 Entrepreneurship and Small Enterprise Management

To acquaint students with the concepts of entrepreneurship and small business enterprises and to familiarize with the entrepreneurial development process.

Outcome 2.4 Fundamentals of Computers

The course is designed to equip students with the basic concepts of computers and their applications in business organizations.

B.Com III Semester

Outcome 3.1: Corporate Accounting – I

The course aims at providing higher knowledge and exposure to the students in the application of corporate accounting principles and methods

Outcome 3.2: Principles of Marketing

To enable students to understand and familiarize the fundamental concepts and principles of marketing of goods and services

Outcome 3.3 Secretarial Practice

To familiarise the students with the fundamental concepts and functions to be performed by corporate secretaries

Outcome3.4 Human Resource Management

The course is designed to develop a knowledge base of basic concepts and skills required in the management of human resources employed in business organizations.

Outcome 3.4 Business Statistics – I

To equip students with the understanding and application of statistical methods in business data processing and interpretation

Outcome 3.5 Commercial Arithmetic

To acquaint the students with the concepts and application of arithmetic principles and techniques in business decisions.

Outcome 3.6 Computer Applications – I

To familiarize and to develop computer application skills among the students

B.Com IV Semester

Outcome 4.1 Corporate Accounting – II

The course is designed to provide higher knowledge and exposure in the application of corporate accounting principles and methods

Outcome 4.2 Law and Practice of Banking

To familiarize the students with the basic concepts and application of provisions of Banking Regulation Act

Outcome 4.3 Fundamentals of Financial Management

To enable students to understand the concepts and principles of financial management of business organizations

Outcome 4.4 Indian Financial System

To familiarize with the fundamental concepts and working of Indian financial system and its constituents

Outcome 4.5 Business Statistics – II

To develop the understanding and application of statistical methods in business data processing and interpretation

Outcome 4.6 Commercial Arithmetic – II

To acquaint the students with the concepts and application of arithmetic principles and techniques in business decisions

Outcome 4.7 Computer Applications-II

To acquaint and to develop computer application skills among the students for various business applications

B.Com V Semester

Outcome: 5.1 : Cost Accounting – I

The paper aims to develop the conceptual knowledge and skills and familiarises the uses of cost accounting methods and techniques.

Outcome: 5.2: Income Tax: Law and Practice - I

To develop an understanding of the basic concepts and principles of income tax law and develop necessary skills in computation of income tax under various heads.

Outcome: 5.3: Principles and Practice of Auditing

To equip students with concepts, techniques and methods of audit process employed in business organizations.

Outcome: 5.4: Computer Applications in Business

The course is designed to acquaint with the concepts and develop computer applications among the students in various functional areas of business.

Outcome: 5.5: Financial Services

To familiarise with concepts and developments in the field of financial services

Outcome: 5.6: Accounting Theory

To acquaint students with the conceptual framework of accounting and reporting

B.Com VI Semester

Outcome: 6.1: Cost Accounting – II

To enable students to acquaint with the applications of cost accounting tools and methods in business decision-making process and control.

Outcome: 6.2: Income Tax: Law And Practice – II

To develop an understanding of the concepts, principles and procedures of income tax law and develop skills relating to income computation and filing of returns.

Outcome: 6.3: Business Laws

To acquaint students with the fundamentals of various business laws as applicable to Business organizations in India.

Outcome: 6.4: Computer Applications In Business

To develop conceptual and technical skills among the students relating to computerized accounting process.

Outcome: 6.5: Principles of Foreign Exchange

To develop an understanding of the basic concepts and principles of foreign exchange market

Outcome: 6.6: Management Accounting

To develop an understanding concepts and methods of management accounting system.

ARTS STREAM (BA)

PROGRAMME OUTCOMES

- To offer the students with the opportunity to enhance and pursue skills in Geographical, Political, Economical, Historical, and Sociological.
- Educate students in both the creativity and efficacy of the Kannada English and Hindi language through the study of literature and other modern forms of ethos.
- Empower and encourage the students to appear for various competitive examinations.
- The students will be ignited enough through the knowledge of the special PG programme to think and act over for the solution of various issues prevailed in the human life to make this world better than ever.
- Programme cater the human values and to make them responsible person and citizen in the society.

PROGRAMME SPECIFIC OUTCOMES

- Students will develop functional knowledge of Kannada, English and Hindi.
- The programme enables the students to Communicate effectively on various activities and make effective presentations.
- To stimulate students and to introduce them to the significant and varied potentials for future studies in Sociology.

- To apprise the students with fundamental political concepts essential for understanding political systems, concepts and theories
- This program will help to students to understand the natural processes on the earth and beneath the earth surface, which directly and indirectly affecting on the human life.
- Student understands to appraise and identify different empire in Indian history.
- The students are introduced with the concept of economics theory and which develops an understanding of policy employment according to the economic condition of an Indian economy

GEOGRAPHY

COURSE OUT COME

Semester – I : Geomorphology

- Describing human-environment, and nature-society interactions as well as global human and environmental issues.
- Identifying and explaining the planets human and physical characteristics and processes, from global to local scales.
- Evaluating the impacts of human activities on natural environments.
- Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues.
- Showing an awareness and responsibility for the environment.

Semester – II : Oceanography and Climatology

- Understand the physical basis of the natural greenhouse effect, including the meaning of the term radioactive forcing.
- Know something of the way various human activities are increasing emissions of the natural greenhouse gases, and are also contributing to sulphate aerosols in the troposphere.
- Demonstrate an awareness of the difficulties involved in the detection of any unusual global warming „signal“ above the „background noise“ of natural variability in the Earth“s climate and of attributing (in whole or in part) any such signal to human activity.

- Understand that although a growing scientific consensus has become established through the IPCC, the complexities and uncertainties of the science provide opportunity for climate sceptics to challenge the Panel's findings.
- On successful completion of this course, students should be able to understand the

mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.

Semester – III : Regional Geography of Karnataka

- To understand the Karnataka regions in terms of various physical divisions, their important characteristics and intra-regional disparities in agriculture and industries and to analyze natural and human resource endowments and their conservation and management.
- The main purpose of studying Karnataka Geography is to gain knowledge and understand regional strength of the region and to motivate the students for competitive exams.

Semester – IV : Regional Geography of India

- Identifying and explaining the Indian Geographical Environment, from global to local scales.
- Applying geographical knowledge to everyday living.
- Applying knowledge of global issues to a unique scientific problem.
- Showing an awareness and responsibility for the environment and India.
- Evaluating the impacts of human activities on natural environments special reference to India.

Semester – V :

Evolution of Geographical Thought

- To gain knowledge about development of geographical thought.
- Its develops an idea about evolution of geographical thinking and disciplinary trends in Germany, France, Britain, and United States of America.
- Builds an idea about between environmental determinism and possibillism,

systematic and regional.

- Know about the trends of geographical thoughts

Human Geography

- Students will acquire an understanding of and appreciation for the relationship between geography and culture.
- Students will read, interpret, and generate maps and other geographic

representations as well as extract, analyze, and present information from a spatial

perspective.

- Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.
- Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.
- Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.
- Students will have a general understanding of the various theoretical and methodological approaches in both physical and human geography and be able to develop research questions and critically analyze both qualitative and quantitative data to answer those questions.
- Students will be able to present completed research, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

Economic Geography of the World

- Students will acquire an understanding of and appreciation for the relationship between geography and culture.
- Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective.
- Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.
- Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.
- Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.

- Students will have a general understanding of the various theoretical and methodological approaches in both physical and human geography and be able to develop research questions and critically analyze both qualitative and quantitative data to answer those questions.
- Students will be able to present completed research, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

Semester – VI :

Environmental Geography

- The basic objective of this subject is to apprise the students with the interrelationship between Man and his environment within which he lives and his linkages with other organisms.
- The subject further aims to give broad perspective ideas of environment, ecology and ecosystem.
- The information and their interaction between living organisms with physical and cultural environment.
- The importance of conserving bio-diversity to maintain ecological balance has also been emphasized in this subject.

Agriculture Geography:

- Demonstrate the importance of agricultural geography in the overall understanding of man and environment relationship.
- Understand the determinants of agricultural activities that lead to spatial variation.
- Demonstrate an understanding of the concept, principles and theories in the field of agricultural systems.
- Identify agricultural regions with special reference to India and understand the evolution and development of these regions.
- Evaluate the significance of science and technology in the development of agriculture and the implications on society and ecology.

Settlement Geography:

The aim is to acquaint the student with spatial and structural characteristics of Human settlement under varied environmental conditions, to enable them to diagnose spatial issues related to urban and rural settlements.

HISTORY

COURSE OUTCOME

B.A.-I SemHistory of India (Pre-Historic Age to Kushans) : The course is designed to know influence of Geographical features on Indian History, Pre history of mankind, growth of Civilizations, rise of new religions and establishment of 1st empire in India. These events influence get knowledge of socio-religious-economic political and cultural developments in India

B.A.-II Sem

History of India (From Guptas to 1206 AD) : This paper aims to study the rule of Gupta and Vardhana empires and the consolidation various dynasties in South India It also deals with Foreign invasions on Northern India and rise of early Philosophies and Sects

B.A.-III Sem

History of India (From 1206 to 1526 AD): It deals with administration and reforms of Delhi Sultanates and their Socio, economic and Cultural Contributions. To study the Administration, Trade and Commerce and Cultural Contributions of Vijayanagar empire. It deals with the administration and cultural contributions of Bahamani and Adilshahis dynasties and also the life and social philosophy Bhakti and Sufi Saints

B.A.-IV Sem

History of India (From 1526 to 1707 AD): The course is designed to know the Muslims administration continued in the leadership of Mughals. The contributions of this family especially in the field of art and architecture are notable. These centers now becomes tourists centers and given many employment opportunities. Contributions It also deals with rise of Maratha Empire and their Administration and contribution.

B.A.-V Sem

History of India (From 1707 to 1857 AD): This paper deals with the expansion of British rule and their administrative and extension policies. It deals also with the early resistance and revolts of Indians and domestic and foreign policies of British

History and Culture of Karnataka (From early times to 1336 AD) Paper-II: This paper deals with history of early dynasties of Karnataka and their administration and, Socio-economic contributions. This paper also focus on the cultural contributions major dynasties and the Sharana Movement led by Shri.Basaveshwar .

B.A.-VI Sem

History of India (From 1858 to 1950 AD) Paper-I: Further the paper also aims to study Constitutional and educational developments and labour reforms of British rule. It helps to know the development of modern education system and Indian constitution.

History and Culture of Karnataka (From 1336 to 1956 AD)Paper-II : This paper deals with the minor dynasties and the rule of Hyder Ali and Tipu Sultan and their administrative and cultural contributions. This paper mainly focus the anti British revolts, administration and reforms of Mysore Wodeyars and freedom movement and Unification movement in Karnataka.

Whole syllabus covers entire Indian History and Karnataka History helps the students prepare confidently for competitive exams like KPSC, UPSC and other competitive exams and get employment. Emperors achievements influence on students to develop their personality become a leader. Cultural contributions light on Indian richness of religion, literature, art and fine arts. Indian architectural centers of many ruling families become tourist centers. Contributions of these families helpful to get employment in Tourism. Study of Indian religions and philosophy helps to bring religious harmony, tolerance and peace in the modern Indian society.

POLITICAL SCIENCE

COURSE OUTCOME

Semester – 1

Basic concepts of Political Theory

The subject is to provide the students with basic conepts and democratic ideas to the students. An attempt is made to equip the students community to face the real life situations and make them fit to be global citizens.

Semester – II Western Political Thoughts

The subject is to provide various ideas such as social, political thoughts and types of government.

Semester – III Indian Political thought.

The subject is aims to the students political & social reformers and their hard work to the society and country. To enlighten the youth about their rights, liberties and respect the others.

Semester – IV Comparative Government & Politics.

The subject provides to the students comparison of Governments and powers and functions of legislature executive and judiciary. To enable them to not to make success oriented and job oriented. But also educate them to value oriented citizens.

Semester – V Paper – I Public Administration.

The subject provides to the students to enrich them to crack the competitive examinations, which are the threshold to administrative services and ease them.

Paper – II – International organization.

The subject provides to the students, origin, development & functions of organizations such as league, UNO, IMF, WHO, ILO, IBRD, UNESCO. To educate the people regarding the art of administration.

Semester – VI

Paper - I - International Relations.

The subject provides the students after the cold war, effects of Globalisation on International studies to encourage merit consciousness among the students.

Paper – II Political process and institutions in India.

The subject provides to the students working of the democratic governments and merits & defects, to enrich them to crack the competitive examinations, such as I.A.S & K.A.S. to enable the students to become ideal citizens for today and tomorrow.

SOCIOLOGY

COURSE OUTCOMES.

Semester – 1

Fundamentals of Sociology.

- The Course is fashioned to provide the students with the indepth knowledge of the basic concepts of Sociology.
- The course provides all essential inputs that are needed for an individual to develop Social Personality.

Semester – II

Social Institutions and change/

- The course is framed to provide the students with the knowledge of Social institutions i.e., Marriage and Family.
- The course also highlights the concepts such as stratification, mobility, social change and social Development since change is the law of nature.

Semester – III

Study of Indian Social Thought.

- The course focuses on the topics of noble Social thoughts of the great Indian social thinkers like Basaveshwara, Gandhiji, Ambedkar etc., whose thoughts are alive till today, that are moulding the personality of students.
- The course aims at inculcating social values like Truth, Non – violence, social equality, Casteless and Classless society that has helped our students to develop a broader outlook towards life.

Semester– IV

Study of Western Social Thought.

- The Course is designed to provide the students with the knowledge of Social thoughts of western social thinkers along with the thoughts of Indian social thinkers, that has helped our students to broaden their thinking horizons.
- This course will help the students to think collectively so as to establish a socialistic society.

Semester – V – Paper I

Study of Indian society.

- The course aims at providing an understanding of philosophical basis of Indian society, Socio Religious Importance of Purusharthas and the Ashrama System in one's life time.
- The course will also help the students to realize the significance of the institution of Marriage and Family which have become backbone of our social-life.

Rural Development in India.

- The Course is formulated to provide knowledge to our students with the issues and challenges involved in Rural Development in our country.
- The Course mainly throws light on Rural Development Programmes undertaken by both Central and State Government like C.D.P., I.R.D.P., J.R.Y., TRYSEM etc are helping our students to develop awareness regarding govement programmes and also to bring drastic changes in Rural Communities.

Semester :VI –

Research Methodology Paper I.

- The Course is designed to motivate our students to take positive interest in the field of social research.
- The Course is enabling the students in the eradication of burning social-problems through social – Research.

Semester : VI

Social – Problems in India Paper – II

- ❖ The Course aims at highlighting the severe consequences of major social problems.
- ❖ The Course also helps in the elimination of Social problems in order to save the social life of human – beings.

ECONOMICS

COURSE OUTCOMES

SEMESTER-I

B.A I:MICRO ECONOMICS –I

The student will be able to define and explain the basic concepts and hypothesis in Microeconomic Theory and their relations; analyses consumer equilibrium, obtain and interpret elasticity, define costs of production, categorize and analyses markets, and display an understanding of pricing of products and factors

SEMESTER-II

B.A II : MACRO ECONOMICS

The student will be able to understand the evolution of employment theories and how equilibrium level of income gets determined. The student will be able to explain how interaction of multiplier and accelerator lead to change in income levels. The student will be able to appreciate the working of business cycles and apply the concept in the working of the economy

SEMESTER-III

B.A III: MONETARY ECONOMICS

The student will be able to understand the working of monetary system, understanding the value of money in modern economic context and to study the recent development in banking and finical sectors.

SEMESTER-IV

B.A IV : INTERNATIONAL ECONOMICS

The student will be able to understand the theories of international trade, role of WTO in foreign trade, balance of payment and determination of foreign exchange rate, foreign investment, Make in India v/s Made in India and institution promoting international trade and investment**.**

SEMESTER-V

B.A V: MACRO ECONOMICS (PAPER-I)

The student will be able to understand the evolution of employment theories and how equilibrium level of income gets determined. The student will be able to explain how interaction of multiplier and accelerator lead to change in income levels. The student will be able to appreciate the working of business cycles and apply the concept in the working of the economy

B.A V: INDIAN ECONOMY-I (PAPER-II)

The student will be able to examine the importance of natural resources, to understand the effects of population explosion, to know about the status of poverty and unemployment, to analyze the problems of Indian agriculture and to understand the measures undertaken for the development of Indian Agriculture

SEMESTER-VI

B.A VI : PUBLIC ECONOMICS (PAPER-I)

The student will be able to acquaint the students with the concept of public and private goods, basis for public expenditure, public revenue, canons of taxation and theories of public expenditure, and also to familiarize the students with different concept of budgetary deficits, public budget and fiscal policy

B.A VI : INDIAN ECONOMY-II (PAPER-II)

The student will be able to analyze the structure and condition of Indian Industries, to examine the various problems of industrial labour, to know about the performance of Indian banking sector, to understand the structure of India's foreign trade, to examine the trends and patterns of public expenditure and revenue of Central Government.

SEMESTER-I

B.COM : MANAGERIAL ECONOMICS-I

The course is designed to provide the students with the knowledge of meaning of economics , theory of consumers Behavior, demand & supply, production, cost & revenue, determination of price & output relationship in the market structure , general equilibrium & welfare economics concepts used by individual economical activity in the world. and individual businesses ideas in the market filed & difference between the production &cost prices techniques, & to understand the difference in the marketing strategies as dedicated by products ,etc.

SEMESTER-II

B.COM : MANAGERIAL ECONOMICS-II

the students with understanding of economic concepts and their applications in the functioning of managerial entity. This would enable in optimizing scarce resources and reasoning and optimization skills are included in the curriculum.

SEMESTER-III

B.COM III : MONETARY ECONOMICS

The student will be able to understand the working of monetary system, understanding the value of money in modern economic context and to study the recent development in banking and finical sectors.

SEMESTER-IV

B.COM : INTERNATIONAL ECONOMICS

The student will be able to understand the theories of international trade, role of WTO in foreign trade, balance of payment and determination of foreign exchange rate, foreign investment, Make in India v/s Made in India and institution promoting international trade and investment**.**

SEMESTER-V

B.COM : INDIAN ECONOMY

The student will be able to understand to the familiarize the students with the basic structure of Indian economy & its various economic problems. to understand the effects of population explosion, to know about the status of poverty and unemployment, to analyze the problems of Indian agriculture and to understand the measures undertaken for the development of Indian Agriculture

SEMESTER-VI

B.COM : INDUSTRIAL ECONOMICS

The student will be able to understand the various problems confronting the entrepreneurs in the process of industrialization, to study the significance of industrialization for a developing country for its survival in the highly challenging, complicated and dynamic competitive economic systems; and to examine the impact of rationalization in the process of development and expansion of major and small-scale industries.

KANNADA

COURSE OUTCOMES

B.A , B.Sc, B.com

B.A I Semester (Both Basic and Optional)

1. Pracheen Kannada sahitya mattu kavya

- The course is designed to provide the students about Ancient kannada literature and its effected from Sanskrit,Prakrut, Pali Literature.
- To train the students effectively in the learning process of Kannada language and literature.
- It enables students to understand the origin of Kannada Ancient literature, its development and its themes.
- It enriches influence and support towards Kannada literature.
- It also helps to study about the poets of early period like Adi kavi Pampa, Ponna and Ranna.

B.A II Semester(Both Basic and Optional)

1. Madhyakaleena Kannada Sahitya mattu Kavya

- It helps to study about Vachana sahitya amongst the students
- Medieval kannada literature gained its own position in the history of Kannada Literature.
- Kannada literature has its variety of forms like Vachana Literature, Keertana Sahitya, Shatpadi and Ragale Roopagalu.
- Objectives of Medieval Kannada Literature is to understand the Characteristics of Medieval Kannada Literature such as Social, Religious, literary values among the students.
- Enables the students about Raghavanka's Harischandra Kavya's importance, influence and support.

B.A III Semester(Both Basic and Optional)

1. aaru Atma kathegala aayda bhagagalu

- It helps students to study about the prominent writers like D. Javaregouda, P.Lankesh, R.C Hiremath, S.J Nagalotimath, B Jayashree and G.S Shiddalingayya.
- It enables the students study about the life of S.J Nagalotimath who grown up from poerty and he became doctor and served for society.
- It also enables the students to understand how we over come from the poverty in order to achieve something in life with reference to the G,S Shiddalingayya
- It enables to study about the great Jnanapeeth Awardee Kuvempu's life history, works and his literary achievements.
- Students are able to learn about the racial discrimination with reference to the drama Beralge Koral by Kuvempu also it enables to study about the characters of the drama such as Ekalvya and Dronacharya.

B.A IV Semester(Both Basic and Optional)

1. Kannada Grammar and Sarasammana Samadhi (Novel)

- To enable the learners with the history, evolution ,literary movements and development of literary forms in Kannada literature to inculcate the ethical values of life .
- To orient and enhance the knowledge of the language basics and grammar the bridge course sessions are conducted by the language department.
- To develop and sharpen interpersonal and communication skills.
- To impart and motivate them to learn the State Language with ease and confidence enabling for better communication skills.
- It enables the students to study shivaram Karant's novel Sarasammana Samadhi.
- It also enables the students learn about Ancient Kannada Literature, Bharatiya Kavya Meemamse and the grammar topic such as Chandassu and alankaragalu.

B.A V Semester(Both Basic and Optional)

1. Vaicharika Sahitya Hagu Kathana Kavanagalu

- It helps to study about Prof .Keertinath Kurtkoti's Sahityadalli Vaicharikate, Gopala Krishna Adiga's Swatantryada Hasivu'.

- Also helps to study about ideological literature such as Chandrshekhar Kambar's Moukhika Parampare mattu bharatiya sahitya, Devanur Mahadev's Manaveeyate antaralla adar bagge vivechane.
- It helps to study about " Hosagannada Sahitya aarambh, prerane prabhava''
- It teaches about " Dalita mattu Bandaya sahitya''.
- It enables to study about "Navya sahitya and Pragatisheela sahitya chaluvali"

B.A VI Semester(Both Basic and Optional)

1. Halagannada Vyakarana mattu Bhasha Vignana

- Bharatiya Vyakara shastra has its own identity in that the prominent one is Keshiraja's Shadbamani Darpana which is great work in kannada.
- It enables the students study about the panini's grammar epic Ashtadyayi by reference with keshiraja and other notable scholars.
- It helps the students how to live in the society and how to understand the life and also it provides degree to lead dignified life to students.
- It enables to face how to face and prepare for the competitive exams for successive life.
- It enables the students how the language is helps as tool for knowledgeable life.

B.Sc I Semester MIL (Kannada)

Vijnyan Savahan mattu Adhunik Kannada Kavya

- The course is designed to provide the students about Science and Technology .
- Science is the centre of world's Development .
- Science uses its all knowledge and strength for improvement mankind. Science essential part of life.
- Research and invention are focused are betterment of human life.
- Truth is the main aim of Science.
- To understand all above mentioned theme is main purpose of this course.

B.Sc II Semester MIL (Kannada)

Parisar Sahitya Mattu Kadambari

- The course is designed to provide the students about Nature and Environment ..
- System of Living and Non Living things is called Environment.
- Environmental Novels in Kannada Literature.
- Poornchandra Tejaswi's " Karvalo is one of the best environmental Novel ''
- Study of Environmental and Pollution is the main target of this course.

B.Sc III Semester MIL (Kannada)

Chintan Sahitya Sankalan Mattu Yayati Natak

- It helps to study about Literature of Thought like B.G.L Swami's 'Anehalladalli Hudugiyaru' and K.S.Nisar Ahamed's 'Saralogin Soutu'
- A Study of Humanity well know thinker Prof.Baragur Ramchandrappa 's ' Manaviyate Ondu Anisike'.
- The Study of Understand the human life style Dr. Sudha Murthy and Nemichandra.
- Girish Karnad's well known drama 'Yayati' is the symbol of love and jealous.
- It enables the students how the Literary Thoughts and Drama is helps as tool for knowledgeable life.

B.Sc IV Semester MIL (Kannada)

Chintan Sahitya Sankalan Mattu Bili Saheban Bharat

- The course is designed to provide the students about Ancient kannada literature and its effected from Sanskrit,Prakrut, Pali Literature.
- To train the students effectively in the learning process of Kannada language and literature.
- It helps to study about Vachana sahitya amongst the students.
- A life study of Jim Karbet 's biography 'Bili Saheban Bharath'
- To study of Jim Karbets Prevention of forest, Animals lovely hood nature and other good characteristics.

B.Com I Semester MIL (Kannada)

Vanijya Savahan Mattu Aadhunik Kannada Kavya

- The course is designed to provide the students about communicative language and Modern Kannada poetry.
- As man grow his communication skills also developed. There are variety of communication skills.
- To understand commercial communicative its nature , scope, values.
- The course is designed to understand the Importance and its outcomes of communication and modern kannada poetry.
- Various types of Poetry in modern kannada literature.

B.Com II Semester MIL (Kannada)

Parisar Sahitya Mattu Kadambari

- The course is designed to provide the students about commerce and
- Environmental Literature .
- System of Living and Non Living things is called Environment.
- Environmental Novels in Kannada Literature like Devanur Mahadeva's ' Kusumbale'.
- How to live in life is describe in the novel like language, style,
- techniques , themes character.
- To understand above all is the main purpose of this course.

B.Com III Semester MIL (Kannada)

Lilat Prabhand Sampad Mattu Vanijya Kannada

- The course is designed to provide the students about commerce and
- Environmental Literature .
- To understand Elegant Essay Literature writers like R.Y.
- Dharwadkar, Giraddigovindaraj and Gorur Ramswamy Ayangar
- Elegant Essays tell us how to lead life.
- To understand commercial kannada nature and characteristics.
- Commercial letters like Enquiry letter, Orders letter, Verification letter and Reply letter, Circular letter writing. Above all is the main purpose of this course.

B.Com IV Semester MIL (Kannada)

Lilat Prabhand Sampad Mattu Madi Madidavaru Novel

- The course is designed to provide the students about commerce and Environmental Literature
- To understand Elegant Essay Literature and writers.
- Elegant Essays and Novel tells us to how to lead the valuable life.
- To understand the freedom of nation and its importance.
- Commercial letters like Enquiry letter, Orders letter, Verification letter and Reply letter, Circular letter writing. Above all is the main purpose of this course.

HINDI MIL

COURSE OUTCOME

Hindi MIL outcome for semesters

Course B.A I outcome

पाठ्य क्रम : 1.कहानी संकलन कथा कवल

2। सामान्य निबंध और अनुवाद

- हिंदि भाषा और साहित्य का विकास यात्रा की जानकारी.
- कार्यालय भाषा अधिनियम के बारे में जानकारी.
- अनुवाद का महत्व और अवश्यकता.
- हिंदी गद्य के विविध विधाओं का परिचय जैसे, कहानी नाटक एकांकी उपन्यास निबंध रेखाचित्र संस्मरण आदि.
- जीवन में मां और अन्य संबंधों का महत्व और धार्मिक सहिष्णुता की अनिवार्यता समझा जाएगा.
- जीवन में प्रेम,आकर्षण और मानवीय मूल्यों की आवश्यकता सभी को है इसकी जानकारी मिलेगी.

Course B.A II semester outcome

पाठ्य क्रम : 1 आधुनिक कविता सरिता

2. हिन्दी व्याकरण

- हिंदी के सुप्रसिद्ध कवियों के बारे में जानकारी.
- मनुष्य जीवन में प्रकृति हमेशा प्रेरणा स्तोत्र रही है इसकी जानकारी.
- मानव के जीवन में प्रेम विश्वास करुणा और आपसी समझदारी ही जीवन का नींव है बताना.
- आधुनिक हिंदी कविता का महत्व.
- हिंदी व्याकरण की जानकारी.

Course B.A III semester outcome

पाठ्य क्रम : बकरी नाटक लेखक सर्वेशवर दयाल सक्सेना

- हिंदी नाटक लेखन की जानकारी.
- हिंदी साहित्य में रंगमंच का महत्व.
- भारतीय जनमानस में गांधीजी का और उनके सिद्धांतों का प्रभाव की जानकारी.
- नए नेताओं में गांधीजी के तत्वों का राजनीतिकरण के बारे में अवगत कराना.
- प्रजासत्ताक व्यवस्था में आम आदमी का महत्व समझाना.

Course B.A IV semester outcome

पाठ्य क्रम : छायावादोत्तर हिन्दी कविता

- हिंदी व्याकरण की आवश्यकता.
- हिंदी साहित्य में निबंध और विमर्श लेखन की परंपरा.
- साहित्य में विमर्शात्मक सिद्धांतों का महत्व बताया जायेगा.
- गध्य के विविध विधाओँ का परिचय
- आधुनिक गध्य लेखन मेँ आये परिवर्तन के बारे मेँ जानकारी.

Course B.A V semester outcome

पाठ्य क्रम : उपन्यास रुखोगी नाही राधिका लेखिका उषा प्रियवंदा

- हिंदी उपन्यास लेखन की जानकारी
- हिंदी साहित्य में महिला लेखन के बारे में जानकारी
- प्रवासी भारतीय साहित्य के बारे में जानकारी
- विदेश में रह रहे भारतीय और उनके जीवन में मूल्य, जीवन शैली के बीच संघर्ष की जानकारी
- शिक्षित और स्वतंत्र प्रवृत्ति के महिला का जीवन संघर्ष से अवगत कराना.

Course B.A VI semester outcome

पाठ्य क्रम : यात्रा साहित्य

- हिंदी साहित्य में यात्रा लेखन के जानकारी.
- भारत के प्रसिद्ध यात्रा स्थलों की जानकारी.
- भारत की संस्कृति विविधता के बारे बताया जायेगा.
- भारत में स्थित खानपान, वेशभूषा और जीवन शैली की विविधता का परिचय.

Course B.SC I semester outcome

पाठ्य क्रम : गध्यप्रभा, अनुवाद

- हिंदी गद्य के विविध विधाओं का परिचय.
- मानव जीवन में स्वास्थ्य और मानवीयता की आवश्यकता के बारे में जानकारी.
- भारत की विविध सांस्कृतिक और ऐतिहासिक महत्व की जानकारी.
- खगोल विश्मय की जानकारी.
- भारतीय भाषाओँ में अनुवाद की आवश्यकता.

Course B.Sc II semester outcome

पाठ्य क्रम : एकांकी स्प्तांक

- हिंदी के एकाँकी साहित्य का परिचय
- एकांकी के तत्व के बारे में जानकारी
- भारतीय इतिहास पुराण और मितक की जानकारी
- हिंदी रंगमंच के बारे में जानकारी

Course B.SC III semester outcome

पाठ्य क्रम : कहानी संकलन -आठ अच्छी कहानियां

- हिंदी साहित्य में कहानी साहित्य का परिचय
- हिंदी के प्रसिद्ध कहानी कारों के बारे में जानकारी
- मानव के जीवन में प्राणियों के प्रति और प्रकृति के प्रति प्रेम की आवश्यकता
- मानव जीवन में माननीय मॉल प्रेम आकर्षण की आवश्यकता आधुनिक जगत में जरूरी है.

Course B.Sc IV semester outcome

पाठ्य क्रम : काव्य कलश (कविता संग्रह)

- हिंदी पद्य रचना के बारे में जानकारी.
- हिंदी के प्रसिद्ध कवियों के बारे में जानकारी.
- मानव जीवन में प्रकृति का प्रेम और सौंदर्य का महत्व.
- प्रकृति मानव के लिए वरदान है और सदैव प्रेरणा स्त्रोत है बताना.

Course B.COM I semester outcome

पाठ्य क्रम : गध्य प्रवाह (आधुनिक गध्य संग्रह)

अनुवाद और वाणिज्य पत्राचार

- कार्यालय भाषा हिंदी के बारे में जानकारी.
- संपर्क भाषा हिंदी के बारे में जानकारी.
- कार्यालय पत्राचार और वाणिज्य पत्राचार का परिचय.

- भारतीय भाषाओं में अनुवाद की आवश्यकता.
- योग्यता, व्यवसाय, प्रेम, मानवीय मूल्य आदि के बारे में जानकारी.

B.COM II semester outcome

पाठ्य क्रम : काव्य रत्न (आधुनिक काव्य संग्रह)

वाणिज्य निबंध और सँक्षीप्तीकरण

- आधुनिक हिंदी कविता के बारे में जानकारी.
- हिंदी के प्रसिद्ध कवियों के बारे में जानकारी.
- मनुष्य जीवन में प्रेम करुणा श्रद्धा विश्वास और आपसी समझदारी ही जीवन की नींव है बताना.
- वाणिज्य निबंध लिखने के लेखन के जानकारी
- सँक्षीप्तीकरण का परिचय मिलेगा

ENGLISH

COURSE OUTCOME

- Completion of U.G (B.A) English basic as well as optional helps them to enrich their English Language. Communication skills and to get command over the English language.
- Enables them to cope up with the competitive world for changing their career.
- Studying various Play, Drama, Poem and Lessons enables them for ethical and moral values for the life.
- Prepares them to be a representive persons with studying Personality Development and Communication skills.

SPECIFIC OUTCOMES

- Inspires for pursuing higher studies
- To be self tutor by establishing tuition classes.
- To motivate for research work.
- Inspires to be a translator, orator, writer, critic and phonetic expert.
- Learning LSRW skills through English language helps over all development of their entire career.
- Use of Language lab empowers them to enrich their spoken skills.

B.A I Year (Basic English and Optional English)

- **B.A I semester as fellows;-**

- Students will heighten their awareness of correct usage of English grammar in writing and speaking.
- Helps them to acquire the knowledge of English poets and writers by studying poetry and other literary forms.
- The acquaintance with new English term which is beneficial for the future competitive exam to build their vocabulary power.
- Phonetics enables them to develop their pronunciation and spoken English.

- **B.A II semester as fellows**

- Plays like one act and five motivates them to perform mono acting role
- It helps to develop their cultural field and self perform in the area of Art like Yakshagana, Classical dance, Folkdance etc.
- Phonetics enables to develop and rich linguistics input for writing and spoken English.
- Phonetics motivates learns and arouses curiosity for vowels and consonants and speech organs.

B.A II Year (Basic English and Optional English)

- **B.A III semester as fellows**

- Through knowledge of English Literature motivates them to be as a great writers like the, studying various forms of literature.

- Students can acquire knowledge of self-confidence, stage courage and communication skills.
- Familiarity with major works and major author enables to understand social historical factors that influence literary canon.
- Students will improve their reading skills.

❖ **B.A IV semester as fellows**

- Literature enables them to recognize and study how literary works are imbibed in cultural historical and generic context.
- Studying works and authors enriches creative writing among the students through reading their life and works.
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write.

B.A III Year (Basic English and Optional English)

❖ **B.A V semester as fellows.**

- Studying Criticism and English language motivates them to the journalism field and cope up with the changing competitive world.
- Enables self prepare for competitive world and self prepare for competitive exam .
- Enables to command over English language and communication skills.
- It helps to upgrade for their higher studies.

❖ **B.A VI semester as fellows;-**

- Criticism enables the students to identify, analysis, interpret and describe the critical ideas.
- Studying English literature opens up a world of inspiration and creativity.
- English literature enables developing soft skills that are essential for today's world.
- It is the chance to discover how literature makes the sense of the world thorough stories, poems and novels.
- .Students will be able write analytically in variety of formats, like essays, research papers,

B.Sc Course Outcomes

- **Semester- 1**

- All Knowledge is constituted in Language. But without proficiency in language, it is difficult to transmit knowledge.
- Language is imperative for the acquisition, preservation, dissemination, application and creation of knowledge hence,
- Importance of language learning cannot be over over-emphasized. It is also a fact that language transcends boundaries and barriers;
- The more proficient in communication we are, the more the world expands for us.
- Today the English language is a window to the world.

- **Semester- 2**

- English Language course for under graduate education in science students get knowledge through various soft skills
- Basic English communication skills
- Advanced English communication skills
- Dictionary and study skills
- Creativity through language
- Appreciating Literature

- **Semester- 3**

- The learning outcomes of students are designed to help learners understand the objectives of studying B.Sc in English.
- To help learners use English language for contemporary academic and social needs.
- Students develop all the four language skills which will enhance their communication abilities taking support from literary texts.
- Students will also learn to use language creativity and critically.
- The organization of the courses/papers has been worked in top semesters, wherever needed,
- Keeping in mind the credit load in a given semester as well as the desired outcomes of the course/programme.

❖ **Semester- 4**

- Learning outcomes may be modified by universities/Institution with proper justification, given that text recommended for the course, contexts of teaching
- The Department/Institute/University is expected to encourage its faculty concerned to make suitable pedagogical innovation, in addition to teaching/learning process
- Students majoring in subjects other than English can use these courses as part of general electives

B.Com Course Outcomes

❖ **Semester- 1**

- The present century has increasingly realised the intergrality of all elements in the universe and the interrelatedness of lives in all forms
- Accordingly English language curriculum has evolved over a period of time in india from its Anglo-centric core, it has moved to the educated variant of English with national and international intelligibility.
- The course is designed to provide the students with the basic knowledge of English concepts used in the modern world to understand the differences in marketing communication skills.

❖ **Semester- 2**

- This course will help the students to think strategically and integrate the activates of Human Resource with the English language communication skills to reach organisation goals.
- This course aims at providing ability to understand the world , to think critically and clearly about the local and the global through a reading literature in translation and in the original
- Ability to substantiate critical readings of literary texts in order to persuade others.

SCIENCE STREAM (B.Sc)

PROGRAMME OUTCOME

- To inculcate systematize knowledge of various goods which are widely used in day to day life.
- To inculcate the scientific temper amongst young scientists to become entrepreneurs.
- To enable a student with conventional and contemporary areas in the disciplines of science.
- To enable a student to persues higher education and research so as to meet the adequate requirements of the present society.

PROGRAMME SPECIFIC OUTCOME

After completion of B. Sc. a student is able to

- Pursue higher education so as to achieve mastery over the subject and inturn induces interest in the area.
- To demonstrate, solve and understanding of major concept in all disciplines of science.
- To solve the problem and also think methodically independently and innovatively, logical conclusion.
- Employ critical thinking and scientific knowledge to design to carry out, record and analyze the result.
- Create an awareness of the impact of environment, society and development outside the scientific community.

CHEMISTRY

COURSE OUTCOMES

Semester-I

- Enabling students to manage neutralization titration, acidimetry, alkalinity and etc…
- Enabling students to understand the basic science through structure and models.
- Use modern chemical tools, models, charts and equipments.
- Make aware and handle sophisticated instruments or equipments.
- Understand good laboratory practices and safety.
- To explain nomenclature and stereochemistry, structure reactivities and mechanism of reaction.

Semester-II

- To know the theories of bonding in the molecules, hybridization and limitations.
- Understanding the evidences, reactivities and mechanism of various reactions.
- To enable the student to distinguish between soluble and insoluble solutes in various solvents.
- Enable them to have knowledge of various pesticides, insecticides, fungicides and herbicides.

Semester-III

- To enable the students to understand the importance of inert gases and their compounds in the present scenario.
- To enable the students to be thorough with the general principles of metallurgy during the extraction of metals which are significant in our day to day life
- To enable the students to understand the three dimensional crystal structure of solids.
- To enable the students to know how organic compounds play a vital role in everyday life.
- To enable the students to understand how organic compounds are manufactured on a large scale.
- To enable the students to present the laws of thermodynamics which are based on human observations
- To enable the students to understand the behavior of light through solutions and solid medium.

Semester-IV

- To enable the students to know the importance of nuclear reactions in order to meet the adequate energy crisis and health hazardous.
- To enable the students to understand the importance of polymer in their day to day life.
- To enable the students to know the impact of industrialization on environment.
- To enable the students to design some technique or measure that can minimize the environmental issued.
- To enable the students to design synthetic approach for various compounds which are of industrial importance.

- To enable the students to understand the behavior of particles in different types of solutions.
- To enable the students to understand the importance of adsorption in pollution rich cities and countries.

Semester- V (Paper- I)

- To enable the students to distinguish between double salts and complex salts, their behavior in sold solution state.
- To enable the students to understand the existence of coordination compounds despite the satisfaction of their normal valency.
- To enable the students to know hoe organic compound can be incorporated in the organo-transition of metal complexes, metal clusters and etc…
- To enable the students to understand the synthetic importance of heterocyclic compounds which are widely used in medicine
- To enable the students to make familiar with the different types of reactions that takes place under photochemical conditions.
- To enable the students to understand the importance of natural products.

Semester- V (Paper- II)

- To enable the students to understand the procedure to be followed in the gravimetric estimations.
- To enable the students to understand the significance and applications of glass, cement and nano materials.
- To enable the students to understand the scope of Ultraviolet and Infrared Spectroscopy.
- To enable the students to be familiar with dyes and colors used in day to day life.

Semester- VI (Paper- I)

- To enable the students to understand the significance of coordination compounds.
- To enable the students to know the importance of metals in biological systems.
- To enable the students to understand the importance of chemistry in bio-molecules such as carbohydrates, vitamins, hormones, amino acids and proteins.

- To enable the students to know the importance of chemical reactions in producing electric energy through devices called electrochemical cell.
- To enable the students to understand battery technology and its importance.

Semester- VI (Paper- II)

- To enable the students to be familiar with analytical chemistry this helps them in building skills.
- To enable the students to understand principles, applications and determination of metals.
- To enable the students to enrich the behavior of proton in magnetic field and interpretation of data.
- To enable the students to understand how drugs helps in overcoming the diseases and remedies.
- To enable the students to impart an idea of macro molecules and quantum chemistry.

BOTANY

COURSE OUTCOME

Botany, a branch of Biology, is the science of living plants. Botany includes the study of any kind of plants, ranging from a one-celled creature such as bacteria to huge gigantic plants like Gymnosperms and Angiosperms. The field of Botany is a large one with numerous disciplines attached to it. Botany is an important field, enhancing our understanding of the world in which food plants, medicinal plants, other crop plants and love on the environment. The study, discovering and application of Botany goes on. The medicinal plants have a wide range of biological research.

After completion of degree the students are able to understand the following different branches of botany:

Classical Branches: Cytology, Morphology, Plant breeding, Phycology, Mycology, Virology, Bacteriology, Anatomy, Physiology, Embryology. Taxonomy, Genetics, Ecology, Evolution, Paleontology etc.

Allied branches: Phytogeography, Parasitology, Potophytology, Microbiology, Virology etc. Interdisciplinary branches: Biophysics, Biochemistry and Biostatistics, Bio-computer etc.

Applied branches: Agriculture, Sylviculture, Food technology, Plant pathology etc.

Specialized branches: Biotechnology, Bioinformatics, Genetic engineering etc.

By considering the above branches the outcome of the mentioned syllabus is –

B. Sc. I Semester

Diversity of microbes, algae, fungi and lichens

On the completion of the course, students are able to understand

- Occurrence
- Morphology
- Systematic position
- Thallus organization
- Pigmentation
- Reserved food materials
- Life cycle patterns
- Disease and control measures and
- Economic importance of the microbes, algae, fungi and lichens

B. Sc. II Semester

Diversity of bryophytes, pteridophytes and gymnosperms

On the completion of the course, students are able to understand

- Occurrence
- Morphology
- Systematic position
- Thallus organization
- Reserved food materials
- Life cycle patterns and
- Economic importance of the bryophytes, pteridophytes and gymnosperms

B. Sc. III Semester

Anatomy and embryology of angiosperms

On the completion of the course, students are able to

- Gain the knowledge about structure and function of plant tissues, and position of different plant tissues in the angiosperm plant body.
- Know about the internal structure of the angiosperms.
- Understand the normal and anamolous secondary growth in angiosperm.
- Understand the male and female reproductive structures of angiosperms
- Know about microsporogenesis, megasporogenesis, gametogenesis pollen pistil interasction, germ units, fertilization and post fertilization changes in angiosperms.
- Know about the anamolies in the development of embryo and endosperm of angiosperms.

B. Sc. IV Semester

Plant physiology and phytochemistry

On the completion of the course, students are able to

- Know the importance and scope of plant physiology and phytochemistry
- Understand the plant water relations
- Learn about the mineral nutrition's with their significance
- Understand the processes of different vital activities of plants
- Understand the seed dormancy with role a factors and their significance
- Understand the properties and functions of enzymes, general account of phytochemistry and secondary metabolites.

B. Sc. V Semester

P-I: Morphology of angiosperms and taxonomy

P-II: Ecology and economic botany

On the completion of the course, students are able to

- Understand about the morphology of angiosperms
- Know about the history and concepts of classifications, and systems of classifications
- Know about the morphological variations in some dicot and monocot families with examples.
- Understand the herbarium techniques, importance of botanical gardens and organization (BSI)

- Understand the composition of biosphere
- Understand the plant adaptation in different habitats
- Understand the plants biodiversity
- Learn the phytogeography and conservation
- Understand the type of pollution and global climatic changes
- Learn about the plants utilization

VI Semester

P-I: Cell Biology, Genetics and Molecular Biology

P-II: Evolution, Plant Breeding and plant biochemistry

On the completion of the course, students are able to

- Gain knowledge about the cell science and molecular biology
- Understand the genetic inheritance and genetic variations in plants
- Understand the concepts and trends in the evolution of plants
- Learn the plant propagation and plant breeding
- Learn the history, scope techniques and significance of plant tissue culture
- Understand the plant genetic engineering and transgenic plants

Career prospects:

Because of the explosion of knowledge about plants in the nineteenth and twentieth centuries, Botany is now subdivided into many major fields. Graduates having studied Botany as one of their subjects need not find it difficult to opt a proper career. A Bachelors degree with Botany has excellent career prospects. They have Jobs waiting in government and private organizations. They could also opt for research and teaching jobs.

Graduates having studied Botany can work as Botanical garden curators, & Forest conservators as for governmental agencies such as a state department of natural resources or Environmental Protection Agency (EPA). Some can work to protect natural resources and minimize harm to plant and animal populations. The study of wild plants helps us to "how learn to coexist with them and to preserve endangered species".

Graduates with botany as one optional subject have opportunities in the Companies / organizations like Pharmaceutical, biotechnology, Chemical Medical laboratories, Clinics/hospitals Research laboratories, National parks / Wildlife sanctuaries, Natural history museums, Environmental companies, Pest control etc.

MATHEMATICS

PROGRAM SPECIFIC OUTCOME

A student can think in a critical manner.

- A student should be able to
  i) recall basic facts about mathematics
  ii) display knowledge of conventions such as notations, terminology, recognize basic geometrical figures and graphical displays
  iii) state important facts resulting from their studies.
- A student should get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning.
- A student should get adequate exposure to global and local concerns that explore them many aspects of Mathematical Sciences.
- A student should be able to apply their skills and knowledge to translate information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.
- A student should be made aware of history of mathematics and hence of its past, present and future role as part of our culture.

COURSE OUTCOME

B. Sc. First year

Differential Calculus

Students will able to

- Identify algebraic and order properties of real numbers.
- Identify and apply the function properties of real number system such as the Completeness property.
- To solve problems on inequalities.
- Verify the values of limit of a function at a point using the definition of a limit.

- To define continuity of a function at a point, analyze the properties of continuity.
- Intermediate Value Theorem and solve the problems
- Students will be familiar with the techniques of differentiation of function with real variables (i.e., n^{th} derivative of functions)
- Identify and apply the Mean Value Theorems and L-Hospitals' rule.

Linear Algebra

Student will be able to

- Define Vector Space, Quotient space, Direct sum, linear span and linear independence, basis and inner product.
- Use the concept of basis and dimension of vector spaces, linear dependence and linear independence to solve problems.
- Discuss about linear transformations, rank, nullity.
- Acquire the knowledge of a matrix and basic operations of a matrix
- To define and find rank of a matrix and to solve system of linear equations using Matrix method.
- Ability to use properties of determinants.

Integral Calculus

Student will be able to

- Prove reduction formulae and solve some problems by using these formulae
- Explain properties of definite integrals.
- To apply definite integral to areas, length of arc, volumes and surface areas of solids by the revolution of curve.

Analytical Geometry

Students will able to

- To define and identify different forms of equation of sphere, to find equation of tangent plane, tangent plane property, Orthogonal spheres and to solve problems and to analyze how geometry is related to algebra by using their algebraic equations.
- To prove that section of a sphere is a plane. Orthogonal spheres and to solve problems and to analyze how geometry is related to algebra by using their algebraic equations.

- Define Cone and Cylinder, Right circular cone and cylinder, Enveloping cone and Cylinder and to solve the problems on these concepts

B. Sc. Second year

Set, Group Theory and Ring Theory

Students will able to-

- Define set, arbitrary union and intersection of sets.
- Distinguish between D'Morgan's law and its Generalized form .
- To explain countable and uncountable sets and its properties
- Identify the various algebraic structures with their corresponding binary operations.
- Generalize the groups on the basis of their orders, elements, order of elements and group relations.
- Define subgroup, center, Normalizer of a subgroup.
- Find cycles and transpositions of a given permutations.
- Define cyclic groups.
- Prove a group has no proper subgroup if it is cyclic group of prime order.
- Use Lagrange's Theorem to analyze the cyclic subgroups of a group
- Define normal subgroup, quotient group and index of a subgroup.
- Define homomorphism, kernel of a homomorphism, isomorphism.
- Prove Cayley's theorem, the fundamental theorem of homomorphism for groups.
- Define rings, zero divisors of a ring, integral domain, field and prove theorems.

Numbers Theory

Students will able to

- Illustrate the Division and Euclidean Algorithm
- Describe the properties of prime numbers
- Show that every positive integer can be expressed as product of prime power in unique way.
- Write a formula for the number of positive integers less than n that are relatively prime to n
- Define congruences and describe the properties of congruences
- Find the Sum, product of all the divisors of N.
- Find the smallest number with N divisors.

- Solve the system of linear congruences
- State and prove Chinese Remainder Theorem, Fermat's and Wilson's theorem

Real Analysis –I

Students will able to

- Informally explain concept of limit and continuity of function of two variables
- Understand the two path criterion to show that a limit does not exist and apply it to solve problems about limits.
- Memorize definition of partial derivative and Calculate first and second partial derivatives
- To understand the applications of partial differentiation.
- To estimate maxima and minima of multivariable function.
- Apply Lagrange method of undetermined Multipliers of multivariable function.

Trigonometry

Students will have the knowledge and skills to:

- Expand powers of sine and cosine in series of sine and cosine multiple angles.
- To establish relation between hyperbolic and circular functions.
- To express logarithm of complex number into real and imaginary parts and to find its principle and general values.
- Summation of Trigonometric Series.

Sequence and Series

Students will able to

- Define different types of sequence.
- Discuss the behaviour of the geometric sequence.
- Prove properties of convergent and divergent sequence.
- Verify the given sequence in convergent and divergent by using behaviour of Monotonic sequence.
- Prove Cauchy's first limit theorem, Cauchy's Second limit theorem.
- Explain subsequences and upper and lower limits of a sequence.
- Give examples for convergent, divergent and oscillatory series.
- Discuss the behaviour of the geometric series.

- Prove theorems on different test of convergence and divergence of a series of positive terms.
- Verify the given series is convergent or divergent by using different test.

Differential equations

Students will able to

- Extract the solution of first order and first degree differential equations by variables separable, Homogeneous and Non-Homogeneous methods.
- Find a solution of differential equations of the first order and of a degree higher than the first by using methods of solvable for p, x and y.
- Compute all the solutions of second and higher order linear differential equations with constant coefficients and with variable coefficients.

B. Sc. Third year Course

Real Analysis –II

The students will learn to

- Understand partitions and their refinement.
- Acquire the idea about upper and lower sums, Riemann Integrability and Riemann Integration.
- Understand various theorems associated with Riemann Integration.
- Develop a knowledge about fundamental, first and second mean value theorems and its applications.
- To distinguish between improper integral of first and second kind and apply comparison test to solve the problems.
- To solve problems on improper integral using Abel's and Dirichlet's test.
- To define Beta and Gamma functions and establish the relation between them and to solve problems.
- Evaluate integrals by using Beta and Gamma functions.
- To evaluate double and triple integrals.
- To apply Leibnitz's theorem to solve problems on integration.

Numerical Analysis

The students will learn to

- How to find the roots of the equation by various methods.
- Define Basic concepts of operators $\Delta\ E\ \nabla$
- Find the difference of polynomial
- Solve problems using Newton forward formula and Newton backward formula.
- To derive and solve problems on Simpson's $1/3^{rd}$,$3/8^{th}$ and trapezoidal rule

Statics

Students will able to

- Define Resultant, Component of a Force, Coplanar forces, like and unlike parallel forces, moment of a force and Couple with examples.
- Prove the Parallelogram of Forces, Triangle of Forces, Converse of the Triangle of Forces, polygon of Forces, Lami's Theorem, Varignon's theorem of moments.
- Find the resultant of coplanar couples, equilibrium of couples and the equation to the line of action of the resultant.
- Define catenary and obtain the equation to the common catenary. Find the tension at any point and discuss the geometrical properties of a catenary.

Differential equations

Students will able to

- Solve simultaneous linear equations with constant coefficients and total differential equations.
- Form the partial differential equations. Solve the problems on Pfaffian (total) differential equations.
- Find the solution of First order partial differential equations for some standard types.
- Find the law of force if the orbit is given and vice versa.

Dynamics

Students will able to

- To derive, memorize and solve problems on radial, transverse, tangential and normal velocity and accelerations
- Define Projectile, impact and laws of impact.
- Prove that the path of a projectile is a parabola.
- Find the direct and oblique impact of smooth elastic spheres.
- Find the law of force if the orbit is given and vice versa.

Complex Analysis

Students will have the knowledge and skills to:

- Define continuity and differentiability for complex functions and understand the significance of differentiability for complex functions and be familiar with the Cauchy-Riemann equations.
- Prove the Cauchy-Riemann equations and apply them to complex functions in order to determine whether a given continuous function is complex differentiable.
- Evaluate integrals along a path directly from the definition and also via Cauchy's theorem. Use Cauchy's integral theorem and formula to compute line integrals
- Represent functions as Taylor and Laurent expansions of simple functions, determining the nature of the singularities and calculating residues at poles
- Prove the Cauchy Residue Theorem and use it to evaluate complex integrals, real integrals using the residue theorem.

Laplace transforms, Fourier transform and Topology

Students will have the knowledge and skills to:

- Learn the methods and properties of Laplace transform and Inverse Laplace Transform, apply them to solve Linear Differential equations.
- Apply the fundamental concepts of Fourier series, Fourier Sine series, Fourier Cosine series, Half range sine and cosine series.
- Understand terms, definitions and theorems related to topology.
- Demonstrate knowledge and understanding of concepts such as open and closed sets, interior, closure and boundary.

ZOOLOGY

COURSE OUTCOME

Semester - I **NON CHORDATES** (This is divided into nine phyla which include useful , non-useful animals, many types of parasites (both ecto and endo-parasites), vectors, edible and animals non edible present both in water and on land. The biggest group of animals i.e. insect also belongs to this category.)

- Study of useful insects like honey bee orient students to understand life cycle of them, know how they synthesize honey, the steps to enhance honey production. In future this study motivate to take up self employment thorough practising bee-keeping.
- Study of parasites provide an opportunity to understand what are the hosts, what are the vectors, what are the disease caused by each parasite, what are the control and preventing measures. With this information one can avoid the parasite contact and diseases to be caused by them.
- Study of this would enlighten the students about proper biodiversity.

Semester – II CHORDATES (This is divided into protochordates and vertebrates which includes Pisces, amphibian, reptilian, aves and mammals)

Outcome:

- This course is designed to know about morphology, anatomy, body organization, habitat and life history of higher animals.
- This study enables to know beneficial and non beneficial higher animals and interaction between them which provide a situation to plan living.

- Study of snakes would provide information to make out difference between poisonous and non-poisonous snakes by looking from some distance. Based on markings of snake biting, it is easy to identify whether it is of poisonous snake or of non poisonous snake.

3.1 Histology

- This branch provides information on cells type, composition and arrangement in a tissue in normal condition. Variation in normal arrangement indicates a defect. So, this provides students an opportunities to differentiate normal and abnormal cell.

3.2 Evolution

- This branch aims to enlighten the students about different forms of life existing in different parts of the world. It explains role of environment in diversity of life. Study of this enable the students to know the environment in the past.

Biostatistics

- This branch provides an opportunity to deals with collection, classification and tabulation of numerical facts as the basis for explanation, description and comparison of biological data.

Semester - IV MOLECULA CELL BIOLOGY AND DEVELOPMENTAL BIOLOGY

Outcome: 4.1 Molecular Biology

- *Molecular biology* aims to understand formations, actions, and regulations of various parts of cells which can be used to efficiently target new drugs, diagnose disease, and understand the physiology of the cell.

- Molecular biology make students know the methods which have value in application to a wide variety of problems affecting the overall human condition. Disease prevention and treatment, generation of new protein products, and manipulation of plants and animals for desired phenotypic traits are all applications that are routinely addressed by the application of molecular biology methods.

Outcome: 4.2 **Developmental Biology**

- Developmental Biology aims to understand the processes that lead from the fertilisation of an egg cell (or equivalent) to the formation of a well-structured and functional multicellular organism

Semester: V BIOCHEMISTRY AND PHYSIOLOGY

Outcome: 5.1 Biochemistry

- Biochemistry study aims to understand the structures and functions of enzymes, proteins, carbohydrates, fats, process of metabolism and the molecular basis of the action of genes.
- This course provide students an opportunity to work in area like medical research, pharmaceuticals, food processing and packaging industries, biological processes, research work etc.

Outcome: 5.2 Physiology

- This course aims to understand the students about Physiological concepts of homeostasis and control mechanisms and to study the functions of body systems-with emphasis on effective treatment of abnormal or disease states.

- Study of this course provide an opportunities in clinical exercise physiologists **work** in coordination with allied health professionals and clinicians, biomedical Scientists, Sports Physiologists, Physiotherapists, research, teaching.
- **Immunology:** It helps study of the tissues, cells and molecules involved in host defence mechanisms.
- Immunogy attempt to understand how the immune system develops, how the body defends itself against disease, and what happens when it all goes wrong.

Semester: VI ETHOLOGY AND APPLIED ZOOLOGY

Outcome: 6.1 Ethology

- Ethology is important in understanding animal behaviour especially in animal parks, animal husbandry, and when using animals in scientific research and in animal welfare

Outcome: 6.2 Applied Zoology

- This course help the students about the **application** of zoological knowledge for the benefit of mankind, in uberstanding animal world that is associated with the economy, health and welfare of humans. This course also enlighten students on culturing animals for mass production for human use and to control or eradicate animals that are injurious to man directly or indirectly.

PHYSICS

COURSE OUTCOMES

Semester-I

Outcome of unit -1: Frames of reference and Linear momentum:

The course is designed to provide the students with the basic knowledge of Co-ordinate systems , Inertial and non inertial frame of reference , Galilean transformations and various types of forces. This study will enhance the knowledge of students to pursue higher study.

The course provides the students to learn the concept of momentum, centre of mass and elastic and inelastic collisions and also the knowledge of Rocket propulsion principle.

Outcome of unit -2: Angular momentum and simple harmonic motion:

The course is designed to gain the knowledge about rotational motion and Simple harmonic motion. In rotational motion students study the basic terms like angular velocity, angular momentum, torque etc. Whereas in Simple harmonic motion, course also provide students to upgrade the knowledge about oscillatory motion.

Outcome of unit -3: Moment of Inertia and Acceleration due to gravity:

The course is designed to provide the students with the basic knowledge of inertia, law of inertia .They learn MI of various shaped bodies and MI of Flywheel.

The course provides the students to learn the concept of acceleration due to gravity, They performed various experiments to find “g” value at given place.

The course will provide the students to enhance their knowledge pursue Higher study

.**Outcome of unit -4: Elasticity, Surface tension and Viscosity:**

The course is designed to study the basics of elasticity, surface tension and viscosity. So, the course will develop the students to enhance their knowledge and pursue the Higher study

Semester-II

Outcome of unit -1: Kinetic Theory of Gases:

The course aims to provide conceptual understanding of basics of kinetic theory of gases. It will also enhance skills of analyzing and understanding of the students by which they will go to higher education.

Outcome of unit -2: Thermodynamics:

This course is designed to provide basic study of various Heat engines. The course will also develop understanding of fundamental laws of thermodynamics. The course study provide ample opportunities in the field of automobiles.

Outcome of unit -3: Low temperature and pressure:

The course aims to provide to understand the production and measurement of low temperatures and pressure. The study provides ample opportunities in the field of research and higher educations.

Outcome of unit -4:Radiation :

The course will help the students to understand the basic concepts like radiation pressure , black body radiation and various laws of radiation. This study will help the students to obtain various higher education courses in his / her future life .

Outcome of unit -5 : Energy sources and Sound :

The course is designed to provide the students to study various types of energy sources mainly renewable energy sources and non renewable energy sources.

The course is also designed to understand basics of sound .This course will help the students to enhance their knowledge and pursue the higher education.

Semester-III (Geometrical optics and Electricity:

Outcome of unit -1: Fermat's Principle , Aberrations and Oculars:

The course designed to enable the students to learn basic laws of reflection, refraction in ray optics. It provides knowledge about defect free image formation and construction of various eyepieces This basic study helps the students to develop their knowledge in the field of ray optics.

Outcome of unit -2: Electrostatics:

The course designed to enable the students to understand basics in static electricity. It also enables the students to understand electric forces and if charges are in motion they produce magnetic field along with electric field.

Outcome of unit -3 & 4: Current electricity & Alternating current

The course designed to enable the students to learn basic concept like electrical energy is transmitted very rapidly. There are many physical effects involving electrical energy which makes possible conversion into light , sound , motion , force, heat, cooling etc. This basic study helps the students to develop their knowledge in the field of current electricity.

Outcome of unit -5: Electrical instruments and measurements:

The course will help the students to understand the basic concepts of measurement of voltage, current , frequency, capacitance, resistance, inductance etc,. For this we need instrumentation. This course will provides required knowledge of measurements of various electrical parameters. Hence it will make the students to pursue higher education .

Semester-IV

(Physical optics Thermoelectricity and electromagnetic theory):

Outcome of unit -1: Interference, Interference due to division of amplitude :

The course designed to enable the students to learn basic properties of light like wave nature,. The concept is used in the Holography. The student makes use of this conceptual understanding for their higher education.

Outcome of unit -2: Diffraction:

This course provide the students to study the basic properties like bending of light. On this basis of this concept students learn various class of diffraction namely, Fresnel diffraction and Fraunhoffer diffraction. This study will enhance the knowledge of students to pursue higher study.

Outcome of unit -3: Polarization:

The course is designed to enable the students to learn analysis of polarized light,. Optical activity, Polaroides, polarimeters and also basic properties of light based on the concept of Polarization. This study will enhance the knowledge of students to pursue higher study.

Outcome of unit -4: Thermoelectricity:

The course is designed to enable the students to learn how thermoelectricity has great potential for increasing energy efficiency by turning waste heat into electricity and also , run backward , solid – state refrigeration applications.

Outcome of unit -5 : Electromagnetic theory:

The course is designed to enable the students to learn how EM theory is an essential for understanding the devices, methods, and systems used for electrical energy. Both electric and magnetic fields are defined in terms of the forces they produce EM theory is a vital tool for the design and operation of these lines and the many devices needed to connect them.

Semester-V (Paper – I & Paper - II)

Outcome of unit -1 & 2: Classical Mechanics & Quantum Mechanics (P-I):

The course is designed to enable the students to learn how Classical theory is an essential for understanding the basics of mechanics at macroscopic level. Similarly quantum mechanics also plays very important role in understanding of mechanics at microscopic level. The theory is useful for the study of the motion of non quantum mechanical, low energy particles in weak gravitational fields. Both the theories plays vital role in the development and enhancement of the knowledge of the students to go for higher study especially in the field of research.

Outcome of unit -3: Atomic Spectra (P-I):

The course is designed to enable the students to learn how Atomic emission spectra arises from electrons jumping from higher energy level to lower energy levels. The different colors of light produced by emission spectra of different elements can be identified by the colors their atoms produce is used to reveal their .Therefore the theory plays vital role in the development and enhancement of the knowledge of the students to go for higher study.

Outcome of unit -1: Molecular Spectra (P-II):

The course is designed to enable the students to learn about molecular energy distribution in the electromagnetic spectrum and the general features of band spectra compared to atomic. This basic study will help the students to pursue higher education.

Outcome of unit -2: Relativity (P-II):

The course aims to enable the students to how relativity has overcome classical physics. The theory explains the behavior of objects in space and time , and it can be used to predict everything from the existence of black holes, light bending due to gravity. So, this Einstein's famous theory helps the students to develop and enhance their knowledge to go for higher education.

Outcome of unit -3: Electronics(P-II):

The course aims to enable the students to understand basics of solid state physics, basics part of electronic devices, digital electronics, etc. The course will make the students to develop and enhance the knowledge of electronics.

Semester-VI (Paper – I & Paper - II)

Outcome of unit -1: Solid State Physics (P-I):

The course is designed to enable the students to learn about the basics of crystal structure, X-ray production and types of X-rays, how specific heat of solids is different for different elements, electrical and thermal conductivities of materials and semiconductors. The course study helps the students to develop and enhance their knowledge in the field of solid state physics and in turn it will help them to go for higher study.

Outcome of unit -2: Magnetic materials, Superconductivity and Nanoscience (P-I):

The course aims to enable the students to understand basics of magnetic properties of materials, development in superconductivity and latest developments and approaches towards nanomaterials.The course study helps the students to develop and enhance their knowledge in the field of solid state physics and in turn it will help them to go for higher study.

Outcome of unit -3: Nuclear Physics (P-I):

The course is designed to enable the students to understand basics of different nuclear theories, nuclear models, nuclear forces, nuclear detectors and accelerators.

The course study helps the students to develop and enhance their knowledge in the field of nuclear physics and in turn it will help them to go for higher study.

Outcome of unit -1: Astrophysics (P-II):

The course aims to enable the students to understand basics of Studying Astronomy and Astrophysics helps to understand Physics better. The energy scales and extreme environments in the universe can't properly be simulated in our earth based labs. So, by studying about the celestial objects we can gain a better understanding of the Physics at these extreme scales. The course study helps the students to develop and enhance their knowledge in the field of Astrophysics and in turn it will help them to go for higher study.

Outcome of unit -2: Computational Physics (P-II):

The course is designed to enable the students to study basic languages in computer science. Being a middle-level language, C reduces the gap between the low-level and high-level languages. It can be used for writing operating systems as well as doing application level programming. Helps to understand the fundamentals of Computer Theories.

This basic study of C-Language will help the student in their future higher education.

Outcome of unit -3 : Electronics II (Integrated circuits ICs) (P-II):

Smaller and faster integrated circuits have revolutionized electronics for a broad range of applications from cell phones to pacemakers. The study of integrated circuits consists of designing

new circuit topologies, analysis, and experimentation to take advantage of these new transistor improvements.

Outcome of unit -4: Electronics II : Digital Electronics, Electronics communication & Modulation and demodulation (P-II):

Students who choose to focus on digital electronics study how networks of semiconductor devices such as transistors perform signal-processing tasks. Examples of such tasks include generating and amplifying speech or music, TV broadcasting and displaying, cell phone and satellite communications. The course is designed to enable the students to study basics of Electronics communication & Modulation and demodulation. In turn the study of Digital electronics, Electronics communication & Modulation and demodulation helps them to go for higher education.

BACHELOR OF COMPUTER APPLICATION

PROGRAMME OUTCOMES

- To indicate the knowledge of all core areas of software and hardware, Programming Knowledge, Mathematical Knowledge, Technical Knowledge, Research Methodology, IT sector, Telecom sector, Artificial Intelligence, Data Science, Image Processing etc.
- To enable a student with conventional as well as contemporary areas in the discipline of Computer Science.
- To pertain principles and entrust professional ethics and responsibilities.
- To work effectively on various flat forms using advanced soft wares to develop new applications which can make life easy.
- Such wide variety of applications of computer science, the students will excel in there interested domains.

PROGRAMME SPECIFIC OUTCOMES.

After the completion of BCA a student is able

- For Pursuing to transform fundamental level to advanced level in Computer Science by doing MCA or MSc (C.S)
- Capable of opting carrier in Software Industry, Telecom Industry, Hardware Industry, IT sector, Competitive Exams, Banking Exams, etc.
- Capable of becoming a successful Entrepreneur in areas such as software, hardware, sales and service of computers, BPO, freelancer, etc. (That is self-employment).

COURSE OUTCOMES

SEMESTER- I

OUTCOME 1.1: C-PROGRAMMING

The course is designed to provide the students with the basic knowledge of programming concepts used by the many programming languages which is a building block. The course acts like a window to the modern programming languages like python, oracle, PL-SQL J2EE, .NET etc

OUTCOME 1.2: INTRODUCTION TO LINUX

The course is designed to provide an introduction to UNIX operating system with the basic knowledge of programming concepts.

OUTCOME 1.3: MATHEMATICS

The course is designed to develop the basic mathematical skills to incorporate the mathematical knowledge in programming languages like, c-programming, c++ programming, JAVA, python, oracle, PL-SQL J2EE, .NET etc.

SEMESTER- II

OUTCOME 2.1: FUNDAMENTALS OF DIGITAL LOGIC

The course is designed to provide fundamental understanding on how circuits and hardware communicate within a computer. Digital logic is also key for many other careers in engineering, as well as careers in engineering technology.

OUTCOME 2.2: NUMERICAL AND STATISTICAL METHODS

The course is designed to solve engineering problems that lead to equations that cannot be solved analytically with simple formulas. It is used for data mining, speech recognition, vision and image analysis, data compression, artificial intelligence, and network and traffic modeling. A statistical background is essential for understanding algorithms and statistical properties that form the backbone of computer science.

SEMESTER- III

OUTCOME 3.1: OBJECT ORIENTED PROGRAMMING USING C++

The course is designed to provide the means for building applications requiring real-time physical simulations, high-performance image processing, and mobile sensor applications.

OUTCOME 3.2: VISUAL PROGRAMMING

The course gives the students that the structure of VB is designed in a way that allows programmers to create executable code – Exe files. It enables programmers to develop programs that can be used as front end to databases.

OUTCOME 3.3: DISCRETE MATHEMATICAL STRUCTURES

The course is designed to provide Concepts and notations from discrete mathematics are useful in studying and describing objects and problems in all branches of computer science, such as computer algorithms, programming languages, cryptography, automated theorem proving, and software development.

OUTCOME 3.4: COMPUTER ORGANIZATION & ARCHITECTURE

The subject explores how machines are designed, built, and operate. Knowing what's inside and how it works will help you design, develop, and implement applications better, faster, cheaper, more efficient, and easier to use because you will be able to make informed decisions instead of guest mating and assuming.

SEMESTER- IV

OUTCOME 4.1: DESIGN & ANALYSIS OF ALGORITHMS

The subject explores necessary before writing the program code as it (algorithm) explains the logic even before the code is developed. It is a technique used to measure the effectiveness.

OUTCOME 4.2: SYSTEM ANALYSIS & DESIGN

The subject explores to improve organizational systems, typically through applying software that can help employees accomplish key business tasks more easily and efficiently. As a systems analyst, you will be at the center of developing this software.

OUTCOME 4.3: SYSTEM PROGRAMMING

The course is designed as the subject is an essential and important foundation in any computer's application development, and always evolving to accommodate changes in the computer hardware. System programming leads to the development of computer system software that manages and controls the computer operations.

OUTCOME 4.4: DATA COMMUNICATIONS

The subject allows businesses to reduce expenses and improve efficiency by sharing data and common equipment among many different computers. At the same time, the network may be connected through cables, telephone lines, and infrared beams.

OUTCOME 4.5: MICROPROCESSORS

The Course gives the introduction to Microprocessor, which is an important part of a computer architecture without which you will not be able to perform anything on your computer.

SEMESTER- V

OUTCOME 5.1: OPERATING SYSTEMS

The subject explores the operating system and its Responsibilities. It acts as an interface between the hardware and the programs requesting I/O. It is the most fundamental of all system software programs.

OUTCOME 5.2: INTERNET PROGRAMMING

The subject explores introduction to JAVA and how it can be used to create complete applications that can run on a single computer or be distributed across servers and clients in a network. As a result, you can use it to easily build mobile applications or run on desktop applications that use different operating systems and servers, such as Linux or Windows.

OUTCOME 5.3: DATA BASE MANAGEMENT SYSTEMS

The subject explores how data is organized, which in turn helps the end users share the data quickly and effectively across the organization. A management system helps get quick solutions to database queries, thus making data access faster and more accurate.

OUTCOME 5.4: SOFTWARE ENGINEERING

The subject explores how it is important in almost every industry, in every business, and for every function. It becomes more important as time goes on – if something breaks within your application portfolio, a quick, efficient, and effective fix needs to happen as soon as possible.

OUTCOME 5.4: OPERATIONS RESEARCH

The subject explores how the field of operations research provides a more powerful approach to decision making than ordinary software and data analytics tools. Employing operations research professionals can help companies achieve more complete datasets, consider all available options, predict all possible outcomes and estimate risk.

SEMESTER- VI

OUTCOME 6.1: COMPUTER GRAPHICS

The course explores the ability to quickly visualize newly designed shapes is indispensible. Interactive computer graphics allows the physician to interpret this large volume of data in new and useful ways.

OUTCOME 6.2: E-COMMERCE & WEB DESIGNING

The course explores how your audience perceives your brand. The impression you make on them can either get them to remain on your page and learn about your business or leave your page and turn to a competitor. A good web design helps you keep your leads on your page.

OUTCOME 6.3: INTRODUCTION TO UNIX

The course is designed to provide an introduction to UNIX operating system, its architecture and usage of commands in order to perform different tasks.

OUTCOME 6.4: OBJECT ORIENTED SYSTEM DESIGN

The course is a technical approach for analyzing and designing an application, system, or business by applying object-oriented programming, as well as using visual modeling throughout the software development process to guide stakeholder communication and product quality.

OUTCOME 6.5: COMPUTER NETWORKS

The course is designed to provide an introduction networking system, how they formed, how to share the resources and in communication through network.