Course out come

Department Of Arabic

Semester 1

CO 1: Understand and interpret the values of Holy Quran In selected chapters (Suratul Insheraah, and Surat ut Teen).

CO 2: Improve Effective communication, learn Hygiene and Grooming.

CO 3: Learn to appreciate the aesthetic poetry of Arabic language.

CO 4: Acquire vocabulary and conversational communication skills.

CO 5: Understand the characteristics of Arabic Language and Poets & Poetry in Pre – Islamic Era.

Semester 2

CO 1: understand the value of Shabe Qadr and the day of Salvation with the text of holy Quran.

CO 2: Understand the Rich heritage of Hyderabad and contribution of the nizam meer Osman Ali Khan.

CO 3: Emphasize the importance of girl and nation by learning the poems Al- Bint and An Nasheed Al Watani.

CO 4: Able to understand Grammarby learning the Types of Sentences and Phrases (Al Murakkab Al Mufeed and Al Murakkab an Naquis).

CO 5: Understand the compilation of the Holy Quran and poetry in Islamic Era.

Semester 3

CO 1: Understant and Interpret the History of Holy Quran and Hadeeth.

CO 2: Acquire Moral value and of Human Equality and develop their personality by learning about the life of Moulana Abul kalam Azad.

CO 3: Appreciate the classical poetry Al Ilm by Hazrath Ali (R.A).

CO 4: Correct the common Errors in communication by applying advance grammar (Huroofe Jazima and Huruf e Naasiba).

CO 5: Drag the information about the Arabic Language and Literature during Umayyad Dynasty.

Semester 4

CO 1: Appreciate and learn the life and Ideologies of Prophet Mohammed along with the achievements of famous Sahabiyaat.

CO 2: Explore the monuments of Telangana, and learn about the Personality of Nightingale of India.

CO 3: learn soft skills by learning the aesthetic poetries like Hayaatee and An Najm.

CO 4: Improve the communication skills in Arabic by applying Advance Grammar, Afaal e naaqesa and Huruf Mushabba Bil Fel.

CO 5: Analyze the Contribution of Arabic Language and Literature to various fields of Sciences during Abbasids Era.

OUTCOMES OF ECONOMICS

- Economics is a social science that studies the production, Distribution, Consumption of Goods and Services .It focuses on the behavior and Interactions of economic agents and how economies work.

  Economics analysis can be applied thought out Society in business finance health care ,Government and also applied to diverse subjects as crime education ,the family, law ,Politics religion and environment.

SEMESTER – I

❖ MODULE –I

- Students will learn definitions and concepts of Wealth , Welfare, Scarcity ,Growth, Scope and the Limitation of micro and macro analysis approaches to Economic analysis.

❖ MODULE- II

- Students will understanding the consumer behavior , utility ,analysis, laws of consumers equilibrium, price, income and substitution effect , types of goods and consumer surplus.

❖ MODULE – III

- Students will knowing the supply analysis , Law of demand, Elasticity , methods of measuring elasticity. Law of supply, determinants & derivation of supply curve.

❖ MODULE – IV

- Students will reveal concepts of production functions, Linear & Non Linear homogeneous production functions , returns to scale, Laws of variable proportions in the production surplus.

❖ MODULE – V

- Students will be able to understanding the concepts & types of cost . Implicit and Explicit ,Derivation & relationship between average & marginal cost curves in short run and long run.

SEMESTER –II

MODULE –I

- Student will be able to identifying the basic concepts & theories of macro economics student will be understanding the methods of measurements & difficulties in estimation of national income.

MODULE-II

- Student will be able to knowing the classical & Neo classical theories of employment and the factors influencing consumption function.

MODULE-III

- Student will be able to knowing the types: Determination of level of investment classical; Neo classical & Keynesian theories of interest & types of investment, MEC.

MODULE -IV

- Student will be able to describe the determinants of the demand for money; control of money & derivation of LM curve.

MODULE –V

- Student will be able to understanding Definition; causes; consequences & control of Inflation the Nature characteristics & phases of Business cycle stock market functions &the life insurances and General insurances.

SEMESTER –III

MODULE -I

- Students should be studies concept & types of revenue and relationship between AR & MR identifying the traditional & modern objectives of the firm & profit maximization.

MODULE –II

- Classification of markets short run &long run analysis. Judging the discrimination pricing differences between perfect competition and monopoly.

MODULE –III

- Product differentiation selling cost the homogeneous and heterogeneous oligopoly.

MODULE-IV

- Student will be able to pricing strategies, pricing practices types of pricing state intervention and administrate prices.

MODULE –V

- The functional and personal distribution & theories of rent, wages, interest & profit will be learned by studends.

SEMESTER –IV

MODULE -I

- Student will be able to identifying the meaning & important evolution and multiple theory of public finance &market mechanism.

MODULE -II

- Student will be able to knowing the various theories, principle, growth & pattern effects of public expenditure and cost benefit analysis.

MODULE – III

- Students will be able to evaluations different approaches, types and classification of taxes the approaches to public debt elasticity & buoyancy of taxations.

MODULE – IV

- Objectives redistribution of income, wealth & stabilization, federal financial structures & futures direct and indirect taxes, vat, center, state financial relation.

MODULE - V

- Classification, functional organizational concepts of budget evaluating the state and central budget & financial sector reforms in india & repots on financial communication in india.

SEMESTER – V

MODULE – I

- Economic development & growth, concepts, measurements role of state and market in economic development – PQLI,HDI, PCI,GEM.

MODUL –II

- Factors of economic development, characteristics of developing countries, theories of demographics

MODULE -III

- Theories of Adam Smith, Dived Ricardo, Karl Marks, Schumpeter of economic development, theories of underdevelopment.

MODULE -IV

- Theories of Lewis, Random, Liebenstein, Nurke's Balances growth strategy, Myrdal model.

SEMESTER –V

MODULE – I

- Structure of Indian economy from the time independence changes and the composition of national income and employment natural resources based and population size growth and the implications on the Indian economy.

MODULE – II

- Indian agriculture, role importance and trends in agriculture production and productivity land reforms .Green revolution agriculture ,finance, marketing, price policy and food security in India .

MODULE – III

- Indian industries & service, role, importance & trends in industrial production and service. Industrial policy resolution of 1948,1956,1977,1991. The role of public and private sector in industry and service.

MODULE – IV

- Planning five years plan objectives, strategies, resources, elocutions, targets and achievements. New economic reforms and the implications, globalization in India.

SEMESTER –VI (paper 1

MODULE – I

- Student will be able to understanding the International economics theories of Adam smith, Ricardo and Hicksher ohlin theory of trade.

MODULE -II

- Student will be able to knowing the trade and growth concepts and terms of trade, factors effecting terms of trade & importance of the trade.

MODULE **– III**

- Student will be know about the Barriers of trade, tariff, Quotas, Subsidies and their effects of the optimum tariff.

MODULE – IV

- Student should be able to understanding Balance of payment , types of Disequilibrium , Devaluation & foreign trade , Export and Import , policies of India.

SEMESTER –VI (Paper – II)

MODULE – II

- **Student will be able to understanding the Meaning, Scope of demography components and theories of population & development.**

MODULE – II

- **Population trends in the twenty century, population explosion, international aspects of population growth, determinants of sex, structure agency of population, Social economic implications.**

MODULE – III

- **Trends in fertility rate, factor effecting fertility- Nepatiality, concepts and analysis of marital status , senthetic cohort methods morality rates , life table ,constructions & uses concepts of stable population, methods of population projections.**

MODULE – IV

- **Migration factors, effecting migration, urbanization, study of census of Indian population, population control to family welfare planning, New population policy in India.**

INDIRA PRIYADARSHINI GOVT, DEGREE COLLEGE FOR WOMEN

HISTORY COURSE OUTCOME

B.A I YEAR SEMESTER I (From earliest time to C 700 CE)

- **To understand nature and scope and origin of India.**
- **To analyse geographical features of India**
- **To compare with procedure of various pre history Paleolithic, Mesolithic and Neolithic ages**
- **To give information the indus valley civilization.**
- **To understand early vedic &later vedic periods.**
- **Give information about the raise and fall of new religious movements in sixth centuries.**
- **To give information about Mouryan administration and dharma followed by Ashoka.**
- **To demonstrate Gupta empire administration social and economic conditions and position of women education.**
- **To understand the Harshavardhana and his achievements.**

BA I YEAR SEM II (HISTORY OF INDIA (700 TO 1526CE))

- **Demonstrate the Pallavas Chalukyas Cholas administration.**
- **Give information about bhakthi movement**
- **To demonstrate the foundations of Delhi sultanate**
- **To understand polity administration of Vijayanagar empire**
- **To demonstrate the Brahmins and their contribution to the Deccan culture.**

BA II YEAR SEM III (HISTORY OF INDIA 1526 TO 1857 CE)

- **To understand the raise of Mughal empire and region of shershah suri**
- **To understand the religious policies of Akbhar and downfall of Mughal empire**
- **To understand the raise of maratas and their administrations**
- **To understand geographical condition for gorilla war**
- **To understand advent of Europe**
- **To understand Carnatic war between French and Britain**
- **To understand the revolt of 1857**
- **To understand decline of rural cottage industry**

BA II YEAR SEM IV (HISTORY OF INDIA 1858 TO 1964 CE)

- **To understand India under the crown rule and impact of English education**
- **To understand the importance of administration social religious economic conditions**
- **To understand the social reforms and movement**
- **To understand the growth of nationalism impact of western culture and awakening of Indians**
- **To understand growth of extremism revolutionary movement and worker and peasent movements**
- **To understand the divide and rule british policy foundation of Muslim league and Hindu Mahasabha**
- **To understand the constitute of Indian republic.**

BA III YEAR SEM V (WORLD HISTORY (1453 TO 1815 CE)

- **Students will know about turks and conquest of Constantinople**
- **To understand the Italy in fifteenth century and the domination of the roman catholic church**
- **To understand knowledge about decline of feudalism and emergence of industrialization**
- **The rule of king and their administration in social economic and political religious conditions prevalling in French society**

BA III YEAR SEM V HISTORY OF TELANGANA FROM EARLIEST TIME TO 1724

- **Students will identify various concept emergence of telangana and its pre historic period**
- **Rule of telugu language administration in south indian kingdom**
- **Impact of present day societies ruled by the sammakka sarakka society and development of tribal society**
- **Students will aquire knowledge of deccan muslims kingdom**

Programme Outcomes

Bachelor of Arts (B.A.)

Bachelor in Arts provide many different career options in private for-profit and nonprofit organizations, as well as public sector organizations, including careers in business, law, consulting, state, local, and federal government, journalism and communications, international organization, finance, political campaigns, interest groups, community service and non-governmental organizations, and pre-college and college teaching. At the end of the Programme, the students will learn the following abilities:

- **Community Engagement and Global Understanding**

  This includes the ability to:

- Reflect on one's cultural identities and values
- Demonstrate intercultural awareness and competence
- Recognize and appreciate the real-world context of knowledge
- Promote active citizenship and community engagement

- **Critical and Creative Thinking:**

  This includes the ability to:

- Analyse, synthesize and integrate knowledge
- Critically evaluate the validity of arguments and conclusions
- Practice creative thinking and expression
- Demonstrate the capacity to argue in innovative directions

- **Literacy and Communication**

This includes the ability to:

- Identify, locate, comprehend, and critically evaluate quantitative and qualitative information using visual, numerical, oral, and textual sources
- Communicate concepts and information clearly and in various formats (oral, visual, written, etc.)
- Engage effectively with audiences from different backgrounds

- **Depth and Breadth of Understanding**

This includes the ability to:

- Develop a detailed understanding of the current state of knowledge in one or more disciplines
- Recognize the value, use and limits of multi-disciplinary learning
- Cultivate an openness to consider and engage alternative research perspectives

- **Professional Development and Ethical Behavior**

. This includes the ability to:

- Demonstrate intellectual integrity and academic accountability
- Collaborate respectfully with others, individually and in teams
- Show leadership in professional environments while recognizing diversity
- Manage time effectively and ensure personal organization

B.A POLITICAL SCIENCE – COURSE OUTCOMES

SEMESTER-I

PAPER-I

UNDERSTANDING POLITICAL THEORY

UNIT-I: INTRODUCTION TO POLITICAL THEORY

- Students will analyze Political Theory.
- Students will be able to explain the nature and value of normative thinking.
- Students will understand empirical political theories: system's analysis and structural functionalism.
- Students will be able to discriminate between normative and empirical theories.

UNIT-II: CONCEPTS IN POLITICAL THEORY

- Students will understand the theories of state [origin, nature, functions], they will also evaluate the social contract theory, evolutionary theory, divine origin theory.
- Students will evaluate the concept of state sovereignty and analyze the monistic and pluralistic theories of sovereignty.
- Students will undertake guided research to understand the differentiation between power and authority.
- Students will understand political power and various types of authority.

UNIT-III: POLITICAL VALUES AND THEORITICAL PERSPECTIVE

- Students understand the basic concept of liberty with focus on approaches- liberal, Marxist and feminist.
- Students study the term equality with reference to liberal, Marxist, and feminist approach.
- Like the above two concepts students will evaluate the concept of justice under the light of various approaches.

UNIT-IV: POLITICAL IDEOLOGIES

- Students will analyze the various ideologies that are associated with the discipline of political science.
- Students will critically analyze ideologies like Marxism and its tenants.

- Students will also examine theories like liberalism, neo liberalism, nationalism, multiculturalism etc.

UNIT-V: POLITICAL INSTITUTIONS AND FUNCTIONS

- Students will analyze the importance of political institutions;
    - Executive
    - Legislature
    - Judiciary
- Students will critically evaluate the Indian party system-its development and looking at the ideology of dominant national and regional parties.
- Students will examine the role of various forces on Indian party system—religion, region, language, caste, etc.
- Students will also evaluate the role of pressure groups and media in the functioning of government and political parties.

B.A POLITICAL SCIENCE

SEMESTER-II

PAPER-II

WESTERN POLITICAL THOUGHT

UNIT-I: GREEK POLITICAL THOUGHT

- Students will critically analyze the Greek political thought.
- Students will demonstrate knowledge of key thinkers and concepts.
- Students will be able to evaluate the relevance of Plato's Ideas on justice, education, Communism and most importantly his idea of ideal state.
- Students examine the thoughts of Aristotle [father of political science] on revolution, slavery, forms of government etc.

UNIT-II: MEDIEVAL AND EARLY POLITICAL THOUGHT

- Students understand the medieval and early modern thought of Thomas Aquinas.
- They will study his theory of laws, his views on church with special focus on church-state controversy.
- Students will critically evaluate Niccolo Machiavelli's [father of modern political science] ideas on renaissance, human nature and statecraft.

UNIT-III: SOCIAL CONTRACTUALISTS

- Students will analyze the theory of origin of state given by Thomas Hobbes, John Locke, and JJ Rousseau.
- Students will examine Hobbes ideas on individualism and absolute sovereignty.
- Students will evaluate the theory of natural rights and the concept of limited government given by Locke.
- Students will study JJ Rousseau's most famous concept of general will and popular sovereignty.

UNIT-IV: UTILITARIAN THOUGHT

- Students in this unit will deal with utilitarian thought.
- Students will critically evaluate the concept of utilitarianism and its principles.

- Students will also understand JS Mill famous work ‘On Liberty’ and his ideas on representative government.

UNIT-V: PHILOSOPHY OF DIALECTICS

- Students in this unit will understand 20th century political thought from G.W.F Hegal to Karl Marx.
- Students will study Hegal’s views on dialectics.
- Students will be able to critically evaluate tenants of Marxism i.e historical materialism, class war, surplus value, and revolution.

B.A POLITICAL SCIENCE

SEMESTER-III

PAPER-III

INDIAN GOVERNMENT AND POLITICS

(Imp phases of Indian polity and Union Govt.)

UNIT-I: NATIONALIST MOVEMENT

- Students will analyze the emergence of national movement and appreciate the struggle for freedom.
- Students will be able to describe the extent of influence mass movement had in attaining Swaraj.
- Students will be able to interpret the results of salt Satyagraha and quit India movement.
- Students will be able to express their views on independence and partition.

UNIT-II: CONSTITUTIONAL DEVELOPMENTS

- Students will understand the need for constitution.
- Students will understand the Indian constitution with focus on the role of constituent assembly.
- Students will undertake discussion on list of key features of Indian constitution.
- Students will analyze the role of constitution in democratic society.

UNIT-III: FUNDAMENTAL RIGHTS &DIRECTIVE PRINCIPLES

- Students will assess the status of fundamental rights of citizens of India.
- Students will analyze the features, importance and types of directive principles of state policy.
- Students will understand the sources of fundamental rights and directive principles of state policy.
- Students will examine the difference between fundamental rights and directive principles of state policy.

UNIT-IV: INDIAN UNION

- Students will analyze the important political institutions of the Indian union government:

- ✓ President, Vice President, Prime Minister, Council of Ministers, Parliament: Lok Sabha and Rajya Sabha.

- Students will understand the powers and functions of above institutions.
- Students will understand the role of speaker, deputy speaker, chairman etc of Indian parliament.

UNIT-V: SUPREME COURT

- Students will analyze the importance of Supreme Court and its composition.
- Students will examine the powers and functions of Supreme Court.
- Students will also examine role of judiciary in Indian union, judicial review and judicial activism.

B.A POLITICAL SCIENCE

SEMESTER-IV

PAPER-IV

INDIAN GOVERNMENT AND POLITICS

(State Govt.)

UNIT-I: STATE GOVERNMENT

- Students will analyze the important political institutions of the state government:
  - ✓ Governor, Chief Minister, State Legislature: State Legislative Assembly and State Legislative Council.
- Students will be able to analyze the powers and functions of above institutions.
- Students will understand the role of speaker, deputy speaker, chairman etc of State Legislature.
- Students will analyze the importance of High Court, its composition and its powers and functions.

UNIT-II: UNION-STATE RELATIONS

- Students will assess the nature of Indian federalism with focus on union-state relations.
- Students will understand the working of Indian Federalism.
- Students will examine the recent trends in the field of centre-state relation.

UNIT-III: LOCAL-SELF GOVERNMENT

- Students will understand the significance and role of both rural govt. and urban govt. in development of the country.
- Students will be able to apply the comparative methods of analysis to local govt. research.
- Students develop a deeper understanding of the institutions, politics, processes, and service of local govt.

UNIT-IV: FORMATION OF STATE OF TELANGANA

- Students will understand the historical processes, the agencies and social forces that contributed to the formation of the Telangana state.

- Students will analyze the Nizam's rule in Hyderabad and dalit and peasant movements during 1948.
- Students will understand the provisions of gentlemen's agreement and discuss the Fazal Ali commission.

UNIT-V: SEPARATE TELANGANA AGITATION

- Students will analyze the role of political parties in separate Telangana agitation starting from Telangana Praja Samithi to Telangana Rashtriya Samathi.
- Students will examine the 1969 agitation, 1972 agitation and agitation that took place from 2001-2004.
- Students will examine the Andhra Pradesh reorganization bill 2014.

B.A POLITICAL SCIENCE

SEMESTER-V

PAPER-V (A)

ANCIENT INDIAN THOUGHTS

UNIT-I: ANCIENT INDIAN THOUGHTS

- Students will critically evaluate the ancient Hindu social order.
- Students will understand the key thinkers like Manu, Kautilya, Buddha etc from ancient India.
- Students will demonstrate the understanding and interpretation of key primary documents like Manusmriti, Arthashastra, etc.
- Students will examine the Saptanga theory, Mandala theory, concept of Varna Dharma, Dandaneeti, Ashtanga Marga etc and find its relevance to the contemporary Indian society.

UNIT-II: SOCIAL AND POLITICAL THOUGHTS

- Students will analyze the lives and nationalist thoughts of Raja Ram Mohan Roy, Dayanand Saraswati, Sir Syed Ahmed Khan etc.
- Students will understand the social evils like sati system, child marriage, widow non-remarraige etc and what techniques these reformers used to eradicate the same.
- Students will examine the Aligarh movement and how Sir Syed Ahmed Khan reformed the Muslim society.

UNIT-III: IDEAS OF SOCIAL REFORMERS

- Students will understand the movements against caste and untouchability by Jyoti Rao Phule.
- Students will analyze the role of Eswara Chandra Vidya Sagar in Bengal renaissance.
- Students will critically examine the role of Veersalingam Pantulu in the field of women education, widow remarriage, etc.

UNIT-IV: INDIAN NATIONALIST POLITICAL THOUGHTS

- Students will analyze the role of Mahatma Gandhi in freedom struggle and interpretations of his principles.
- Students will learn Gandhi's ways of dealing with social evils.
- Students will understand the core Gandhian philosophical ideas.

UNIT-V: MODERN INDIAN THOUGHTS

- Students will analyze the concept of democratic socialism as opined by Jawaharlal Nehru.
- Students will examine the life and activities taken up by Jayaprakash Narayan in the post independence era.
- Students will analyze the ideas of Dr B.R Ambedkar in social, economic and political domain.
- Students will critically evaluate his ideas on annihilation of caste, critique of Hinduism and also his journey to Buddhism.

B.A POLITICAL SCIENCE

SEMESTER-V

PAPER-V (B)

INTERNATIONAL RELATIONS

UNIT-I: INTRODUCTION TO INTERNATIONAL RELATONS

- Students will demonstrate understanding of the relations between and amongst the nations.
- Students will critically analyze the difference between international politics and international relations and learn the meaning and definitions of international relations.
- Students will be able to understand the scope, significance and evolution of international relations.

UNIT-II: HISTORY OF ONTERNATIONAL RELATIONS

- Students will assess the rise of sovereign states system.
- Students will understand the causes and consequences of World War I and II.
- Students will be able evaluate the impact of World War I and II on international relations.

UNIT-III: POST WAR ERA

- Students discuses the post war era of and will come up with their opinion regarding colonialism.
- Students will analyze the new concept of decolonization and neo-colonialism.
- Students will critically examine the emergence of third world, their problems and effects of cold war on third world.
- Students will study and examine the causes and effects of cold war, with special reference to USA and USSR.

UNIT-IV: CONCEPTS IN INTERNATIONAL RELATIONS

- Students will undertake guided research to understand the differentiation between power and authority.
- Students will understand national power and various elements of power.
- Students will be able to identify the super power and regional powers in international scenario.

- Students understand the concept of bi-polarity, uni-polarity and multi-polarity and its relevance to contemporary world.

UNIT-V: INTERNATIONAL POLITICAL ECONOMY

- Students will demonstrate a generalized understanding of the dynamic relationship between politics and economics in the present world.
- Students will understand the international economic institutions- their origin, evolution, working, compositions etc.
- Students will study the functions of all the financial institutions in the world- World Bank, IMF, WTO, IBRD etc.
- Students will critically evaluate the concept of globalization and how economic, social, and cultural dimensions of globalization are linked.

B.A POLITICAL SCIENCE

SEMESTER-VI

PAPER-VI (A)

WESTERN POLITICAL THOUGHT

UNIT-I: GREEK POLITICAL THOUGHT

- Students will critically analyze the Greek political thought.
- Students will demonstrate knowledge of key thinkers and concepts.
- Students will be able to evaluate the relevance of Plato's Ideas on justice, education, Communism and most importantly his idea of ideal state.
- Students examine the thoughts of Aristotle [father of political science] on revolution, slavery, forms of government etc.

UNIT-II: MEDIEVAL AND EARLY POLITICAL THOUGHT

- Students understand the medieval and early modern thought of Thomas Aquinas.
- They will study his theory of laws, his views on church with special focus on church-state controversy.
- Students will critically evaluate Niccolo Machiavelli's [father of modern political science] ideas on renaissance, human nature and statecraft.

UNIT-III: SOCIAL CONTRACTUALISTS

- Students will analyze the theory of origin of state given by Thomas Hobbes, John Locke, and JJ Rousseau.
- Students will examine Hobbes ideas on individualism and absolute sovereignty.
- Students will evaluate the theory of natural rights and the concept of limited government given by Locke.
- Students will study JJ Rousseau's most famous concept of general will and popular sovereignty.

UNIT-IV: UTILITARIAN THOUGHT

- Students in this unit will deal with utilitarian thought.
- Students will critically evaluate the concept of utilitarianism and its principles.
- Students will also understand JS Mill famous work 'On Liberty' and his ideas on representative government.

UNIT-V: PHILOSOPHY OF DIALECTICS

- Students in this unit will understand 20th century political thought from G.W.F Hegal to Karl Marx.
- Students will study Hegal's views on dialectics.
- Students will be able to critically evaluate tenants of Marxism i.e historical materialism, class war, surplus value, and revolution.

B.A POLITICAL SCIENCE

SEMESTER-VI

PAPER-VI (B)

INTERNATIONAL RELATIONS 19TH AND 20TH CENTURY

UNIT-I: INTERNATIONAL ORGANISATIONS

- Students will critically evaluate the creation of league of nation and its working with special focus on the reasons for its failure.
- Students understand the meaning of international organization, with special reference to united nation organization.
- Students will understand in detail the structure and organ of UN.
- Students examine the current position of United Nations organization, dominance of USA in UN etc and analyze the reform and reconstruction measure suggested.

UNIT-II: REGIONAL ORGANISATIONS

- Students will understand the concepts of region, regionalism, regionalization, regional identity, regional organization etc.
- Students will analyze the origin and working of SAARC.
- Students will examine the other reginonal organizations-ASEAN, BRICS etc- its working in their particular region.

UNIT-III: INTERNATIONAL SECURITY

- Assess the arguments and evidence surrounding a controversial issue in the world politics.
- Students will be able to differentiate between the idea of positive peace and negative peace.
- Students will be able to gain in depth knowledge of the theoretical bases of national and international security.
- Students will analyze the concept of arms race, arms control, disarmament etc.

UNIT-IV: FOREIGN POLICY

- Students will discuss and evaluate the major theories of foreign policy.
- Students will also analyze the features and determinants of foreign policy.
- Students by understanding the equation between 2 super power, will also understand the concept of non-alignment-its history, evolution and working.

UNIT-V: CONTEMPORARY ISSUES

- Students will understand the concept of human rights- its origin, evolution, sources, UN charter on human rights etc.
- Students will demonstrate knowledge of systems, processes and institutions involved in environmental policy making.
- Students will analyze the basic concepts and terms such as patriarchy, feminism, gender etc and also study various views on feminism from J.S Mills to Karl Marx to India's Vandana Shiva.

Programme Specific Outcomes

Bachelor of Arts (B.A.)

Bachelor of Arts is a 3 years under graduate degree programme, affiliated to Osmania University, Telangana. It offers the education in different languages, ability enhancement courses, skill enhancement courses, general electives and optional papers.

- First Basic: **English**
- Second Basic: Any one of the following languages: **Telugu, Urdu, Arabic & Hindi**

Compulsory Papers:

Ability Enhancement Compulsory Course

1. Environmental Studies (I – Semester)
2. Gender Sensitization (II – Semester)

Skill Enhancement Course

1. Personality Development and Communication Skills (III – Semester)
2. Basics of Computers (IV – Semester)
3. Citizenship Rights, Duties and Laws (V – Semester)
4. Legislative Practices and Procedures (VI – Semester)

General Elective

1. Indian Constitution and Administration (V- Semester)
2. Good Governance (VI – Semester)

- **Optional Subjects**: The students shall offer any one of the following subject combinations consisting of three optional subjects of equal importance:

Computer Applications	Economics	History
Computer Applications	History	Political Science
Economics	History	Political Science
Economics	History	Psychology
Economics	History	Public Administration
Economics	Political Science	Public Administration
History	Political Science	Psychology
History	Political Science	Public Administration

Programme Specific Outcomes: To this end we strive to realize the following set of program specific outcomes for all our undergraduate B.Com students.

Language Papers: English , Telugu, Urdu, Arabic & Hindi:

Students, at the end of the course, would be able to unlock the communicator in them by using International language English, national language Hindi, Arabic Urdu and regional language Telugu appropriately and with confidence for further studies or in professional spheres where these languages are the indispensable tool of communication. Students will gain knowledge of the major traditions of literatures written in the national languages like Hindi and Urdu, also the regional language and appreciation for the diversity of literary and social voices within–and sometimes marginalized by–those traditions. They will develop an ability to read texts in relation to their historical and cultural contexts, in order to gain a richer understanding of both text and context, and to become more aware of themselves as situated historically and culturall

Compulsory Papers:-

1. The students obtained good information on environmental science, its resources and Management. After completion of this paper, students would be able to analyze the ways in which the natural environments

impact the society. Along with that, they would also gain knowledge about the ways and means of managing the natural resources for the benefit of the society.

2. Gender sensitization course helps the students to develop a link between the concept of gender, self and long term recovery and development. It also develop good understanding of gender roles, stereotypes, expectations and issues and their impact on day to day lives as well as so on society.
3. Develops the ability to use current techniques, skills and tools in the field of ICTs, that increases computer skills, usage of electronic media and employability skills.
4. The students obtained knowledge of fundamental Rights and Duties of Citizen, Structure & Functions of Central, and State governments, Judiciary, Legislature and Autonomous body such as Women Commission, Election Commission.

Optional Subjects:

History / Political Science /Economics/ Public Administration/Psychology/Sociology

- **History:** The students obtain wider knowledge of facts and figures of the past and make the learner assimilate the essence of that through multidisciplinary approach. It takes the learners into the intellectual forum through the study of history. It inculcates a sense of nationalism to enable the student community to face the onslaught of communalism and casteism.
- **Public Administration:** The students can develop the knowledge and skills that will enable them to think critically and imaginatively about administration and its related issues. Through coursework, independent studies and collaborative research with faculty, the students will be developing a commitment to broaden the knowledge regarding Indian Administration.
- **Political Science:** The students understand the basic principles of Politics including governing institutions and branches, political wings and organizations, political behavior and the operation of government at both the national and state levels. Understanding government and politics in a comparative perspective and understand government and politics in a global context.
- **Economics:** Students will be familiar with different models of consumer and producer behaviour and have a basic understanding of the operation of a modern economy and able to evaluate the effects of government interventions in individual markets and in the macro economy. They can Analyze operations of

markets under varying competitive conditions. They can analyze causes and consequences of unemployment, inflation and economic growth.

- **Computer Application:** The students understand the basic operations of a computer system and computer application software. They also develop the skill of using computer application software for solving problems
- **Psychology:** The student will develop a strong research background and understand the scientific foundation of psychology. They will learn the base of human behavior across the broad areas of Psychology. They also become aware of the applications of psychology in the professions associated with psychology.

Learning Outcomes' and Programme Objective of

Public Administration

Programme Objective

- The board objectives of the Undergraduate Programme in Public Administration include:
- Understand public administration theory and concepts from multiple perspectives
- Acquaint with the functioning of the Indian administration, at central, state and¬ local levels and the responses of these systems in addressing the concerns of the people;
- Acquaint with India's development experience and changing role of administration
- Understand the interface of theory and practice in Public Administration
- Develop conceptual, analytical and problem solving abilities among the learners
- Acquaint the learner with the required knowledge of administrative science and government in action and the contemporary issues in public affairs management and,
- Understand the world of public administration from the public perspective and¬ provide foundation for further studies in Public Administration
- Understand the role of Public Services in the new State of Telangana

BA I Year Course-1: Introduction to Public Administration

Semester-I: Basics of Public Administration

Semester-II: Development Dynamics and Emerging Trends

- To understand the nature and scope of Public Administration;
- To appreciate the methodological pluralism and synthesizing nature of knowledge in Public Administration;
- To comprehend the changing paradigms of Public Administration;
- To acquaint with the theories, approaches, concepts and principles of Public Administration;
- To understand the administrative theories and concepts to make sense of administrative practices.
- To understand the role of public services in the emergence and development of Telangana state

After study of the Course- The learner should be able to

- Appreciate the nature, scope and changing paradigms of Public Administration;
- Understand the synthesizing nature of knowledge of public administration from public
- perspective; Grasp the administrative theories, concepts and principles to make sense of administrative practices.

BA II Year Course-II:

Semester III: Indian Administration

Semester-IV: State Administration and Emerging Issues

The Objectives of the Course are:

- To understand the historical evolution and socio-economic, political, cultural and global context of Indian Administration;
- To identify the transformative role of Indian Administration;
- To make out the multi-dimensionality of problems and processes of Indian Administration;
- To understand the form and substance of Indian Administration; and
- To appreciate the emerging issues in Indian Administration in the context of changing role of state, market and civil society

Expected Outcomes After study of the course, the learner should be able to:

- Discern the connects and disconnects between structure, purpose and process and results in Indian Administration;
- Understand the Indian Administration role as the main instrument of State to achieve its developmental goals;
- Appreciate the varying historical, socio-economic, political and other conditioning factors that gave Indian Administration its distinct nature to the learner.

BA III Year Course-III:

Semester V: Human Resources Management

Semester-VI: Financial and Material Resources Management

The Objectives of the Course are:

- To comprehend the nature, scope, structure & processes of human resource management;
- To identify the systems and processes of financial and material management;
- To appreciate institutional capacity building strategies and programmes; and
- To understand the changing paradigms of Resources management.

Expected Outcomes After study of the course, the learner should be able to:

- Understand the way in which the public power is exercised and public resources are managed and expanded;
- Unravel the varying methods of performance assessment of public institutions; and
- Appreciate the changing paradigms of human resource management.

BA III Year Course-IV

Sememester V: Local Governance and Development in India (Optional)

Semester-VI: Urban Local Governance

The Objectives of the Course are:

- To understand the concept of democratic decentralisation;
- To trace the evolution of local self-government in India;
- To comprehend the institutional arrangements and processes of rural and urban governance;
- To identify the challenges of development and the administrative responses.
- To sketch out the new organisational arrangements for delivery of public welfare programmes

Expected Outcomes After study of the course, the learner should be able to:

- Critically appreciate the relationship of local governance and development;
- Appreciate the rural and urban institutional arrangements for development;
- Understand the processes and results of systems of delivery of welfare programmes

COURSE OUTCOMES (CO)

Course Code:-BC104	**Program: - B.COM (G&CA)**
Semester – I	**Course title: - FA-I**
HPW :- 5	**Credits – 5**

CO1: To acquire conceptual knowledge of accounting and preparation of final accounts of sole trader.

CO2: Accounting process : To make the student acquire the conceptual knowledge of accounting .

CO3: Subsidiary Books: To understand meaning and advantage of using subsidiary book Technique of recording transactions in various subsidiary books &to learnposting to ledger from subsidiary books.

CO4: BRS: The students will be able to understand the meaning and need for the preparation of bank reconciliation statement; To recognize the reason for the difference between bank balance as per cash book and pass book; To prepare the bank reconciliation statement; To determine the correct bank balance as per cash book;

CO5: Rectification of errors and depreciation:. To understand the types of Errors and their examples; Rectification the Errors : Two sided i.e. Errors not affecting Trial Balance one sided .To Explain Meaning and Utility of Suspense A/c; Maintain Suspense A/c.

CO6: Final Accounts: To understand the concept of financial statements; determine the requirements of financial statements; prepare profit and loss account and balance sheet; discern the financial position of a company.

COURSE OUTCOMES (CO)

Course Code :-BC105	**Program :- B.COM(G) &(C.A)**
Semester – I	**Course title :- BE**
HPW :- 5	**Credits – 5**

CO1: To acquire knowledge for application of economic principles and tools in business practices

CO2: Introduction : conceptual understanding of BE ,features ,importance role and objectives etc.

CO3: Demand Analysis : To understand the Demand analysis and theory and law of demand Data and techniques of demand forecasting Elasticity concepts of demand Various demand elasticities.

CO4: Supply Analysis : To familiarise with law of supply market equilibrium consumer surplus and indifference curve analysis.

CO5: Production analysis: to acquaint the students with the conceptual understanding of production function ,law of variable proportions and economies and diseconomies of scale

CO6: Cost and revenue analysis : To familiarise with traditional and modern approaches break even analysis.

COURSE OUTCOMES (CO)

Course Code :-BC106 **Program :- B.COM(G&CA)**
Semester – I **Course title :- BO**
HPW :- 4 **Credits – 4**

CO1: To acquaint the students with the basics of commerce and Business concepts and functions and forms of Business Organisation.

CO2: Fundamental concepts: To facilitate the student to learn concepts of business, trade industry and commerce.

CO3: Business Organisation : To familiarise with different forms of business organisation its features , merits and demerits.

CO4: Formation of joint stock company : to provide knowledge about the formation of the company ,important documents and the procedure.

CO5: Sources of finance : to make the students understand about the various sources of finance and a brief introduction on shares ,debentures,RE,angle investors,lease , hire ,aand franchising.

CO6: Stock exchange and mutual funds: To understand the functions of stock exchanges types and role of SEBI in regulating them.

COURSE OUTCOMES (CO)

Course Code :-BC107 **Program :- B.COM(G&CA)**
Semester – I **Course title :- IT**
HPW :- 3+2 **Credits – 4**

CO1: To acquire basic knowedge in IT and its applications in the areas of business.

CO2: Introduction: IT provides knowledge about types of computers its input and output devices .

CO3: Operating system: To familiarise with types of OS commands wild card characters Cryptography and using the start menu.

CO4: Word processing: It also provides knowledge of word process and menus and tools bar and its application.

CO5: Spreadsheet It gives knowledge to the students on advance tool information through computer function and formulas in ms excel.

CO6: PPT: to acquaint the students with the preparation of slides and its application along with internet and browsing knowledge

Course Code :-BC204
Course title :- F A-II
Credits – 5

Program :- B.COM(G&CA)
Semester –II
HPW :- 5

CO1: To acquire accounting knowledge of bills of exchange and other business accounting methods

CO2: Bills of exchange: Understand the meaning of bills of exchange and promissory notes. Calculation of due dates and date of maturity. ... Accounting treatment relating to issue, acceptance, discounting, maturity and endorsement of bills.

CO3: Consignment accounts : to understand meaning and features of consignment business. Learn the terminologies used in consignment business Understand the accounting treatment of consignment in the books of consignor and consignee .

CO4: Joint venture accounts : to: Understand the meaning of Joint Venture Learn the need and features of Joint venture business Learn the methods of recording Joint venture transactions Understand the difference between joint venture and consignment

CO5: Accounts from incomplete records :To define the concept of incomplete records: Distinguish between Double entry system and Accounts from incomplete records. Ascertain the amount of profit or loss using" Statement of Affairs" method.

CO6:Accounting for non profit organization: Analyse the theory and purpose of 'fund accounting' and apply fund accounting principles to the recording of monetary transactions of state and local governments and other non profit organizations.

Course Code:-BC205 **Program: - B.COM(G&C.A)**
Course title: - ME-II **Semester –II**
Credits – 5 **HPW: - 5**

CO1: To impart conceptual and practical knowledge of managerial economics.

CO2: Nature and scope of ME: to provide knowledge on basic economic tools in ME and the economist role and responsibility.

CO3: Demand forecasting: students are able to understand demand and demand forecasting.

CO4: market analysis: students get familiarised with different types of market structures.

CO5: Macro economics for managers : to have an idea about national income concepts is measurement ,business cycles.

CO6: Fiscal and monetary policy: to acquaint the students with fiscal policy and monetary policy ,finance commission role and objectives.

Course Code :-BC206 **Program :- B.COM(G&C.A)**
Course title :- POM-II **Semester –II**
Credits – 4 **HPW :- 4**

CO1: to acquaint the students with the principles functions and practices of management

CO2: Introduction : to understand the meaning of management its functions levels of mgt and scientific mgt.

CO3:Planning : to understand the meaning of planning its characteristics ,types , MBO Benefits and weaknesses

CO4: Organizing: to familiarise with meaning of organizing ,its principles types of organisation and span of management.

CO5: Delegation and Decentralization: to provide knowledge on delegation and decentralisation its importance and the difference between them.

CO6: Coordination and control : get familiar with coordination techniques and control and its requirements for effective control

Program :- B.COM(G)
Semester –II

Course Code :-BC207 **Credits – 4**

Course title :- Foreign trade

Credits – 4

CO1: To gain knowledge on India's foreign trade procedures policies and international institutions.

CO2: Introduction : to introduce the meaning of FT ,types documents used in FT.

CO3: BOT &BOP : To provide knowledge on meaning and components of BOT and BOP and concept of disequilibrium.

CO4: Indian trade policy: to familiarise with current export policy and import policy its importance and its implementation.

CO5: Foreign trade and trade blocs : to have knowledge on growth and significance of FT ,Trade blocs types and economic and monetary unions.

CO6: International economic institutions : to acquaint with the knowledge on IMF,IBRD, NDB,AIIB,TTP,UNCTAD and WTO its aims features and agreements.

Program :- B.COM(CA)

Course Code :-BC207 **Semester –II**

Course title :- RDMS **HPW :- 5**

Credits – 5

CO1: to acquire basic conceptual background necessary to design and develop simple database system ,relational database mode,ER model and distributed databases and to write good queries using a standard query language called SQL.

CO2: Basic concepts : To know the basic concept of data base management system and how to store data .

CO3: Database integrity and normalisation : To familiarise with database integrity and normalisation ,file organisation and its types.

CO4: Structures query language: to understand the meaning of SQL commands .Data language Transaction control language.

CO5: Transactions and concurrency management: To facilitate the students with the information on how daily transaction takes place on networks.

CO6 : Distribute and client server databases : with help of RDBMS students get familiar with Distributed client server technology.

COURSE OUTCOMES (CO)

Program :- B.COM(G&CA)

Course Code :-BC301 **Semester – III**

Course title :- POI

HPW :- 2

Credits – 2

CO1: to provide a basic understanding of the Insurance mechanism.

CO2: to identify the relationship between insurers and their customers and the importance of insurance contacts

CO3: give an overview of major life insurance and general insurance products

CO4: understanding the insurance terminology and importance of ethical behaviour

CO5: familiarise with insurance contract terms .

CO6 :understanding of life insurance products and miscellaneous risks .

COURSE OUTCOMES (CO)

Course Code :-BC304 **Program :- B.COM(G&CA)**

Course title: Adv accounting **Semester – III**

HPW :- 5

Credits – 5

CO1: To acquire accounting knowledge of partnership firms and joint stock companies

CO2: Partnership accounts -I : to understand the concepts relating to partnership and problems relating to admission ,retirement ,and death of a partner.

CO3: Partnership accounts –II : to understand and practically solve problems relating to dissolution ,insolvency,and sale of the company.

CO4: Issue of shares ,debentures ,underwriting, and bonus shares

: To familiarise with issue of shares debentures and underwriting and also with accounting of bonus sharees

CO5: Company final accounts and profit prior to incorporation: To understand the structure of companies act and preparation of final accounts of companies.

CO6: Valuation of goodwill and shares : practical orientation of valuation of goodwill and shares.

COURSE OUTCOMES (CO)

Course Code :-BC305 **Program :- B.COM(G&CA)**

Semester – III

Course title :- Income tax-I **HPW :- 5**

Credits – 5

CO1: to acquire conceptual and legal knowledge about Income tax provisions relating to computation of income from different heads with reference to an individual assessee

CO2: Introduction : to give an understanding of direct and indirect taxes and various concepts of IT and also practical knowledge of computation of total income based on residential status.

CO3: Agricultural Income: understanding of agricultural income computation of tax on integration process.

CO4: Income from salaries: familiarise with computation of salary income

CO5: Income from house property: familiarise with computation of income from house property.

CO6: profits and gains of business or profession: to understand computation of depreciation and income from business or profession and provisions relating to it.

COURSE OUTCOMES (CO)

Course Code :-BC306 **Program :- B.COM(G&CA)**

Semester – III

Course title :Business statistics-I **HPW :- 4**

Credits – 4

CO1: To inculcate analytical and computational ability among the students

CO2: Introduction: to introduce origin and development of statistics ,statistical investigation ,sampling methods and data collection methods.

CO3: Diagrammatic and graphic presentation : to give a practical orientation of diagrammatic presentation in the form of graphs diagrams pictograms, histograms etc.

CO4: Measures of central tendency : to familiarise with various measures of central tendency, mean median mode.

CO5: Measures of dispersion ,skewness and kurtosis: to acquaint with various measures of dispersion .range QD,MD, SD, Variation.

CO6: correlation : to understand the meaning and types of correlation.

COURSE OUTCOMES (CO)

Course Code :-BC307 **Program :- B.COM(G)**
Semester – III
Course title :- ED&BE **HPW :- 4**
Credits – 4

CO1: to present an overview of entrepreneurial development and business ethics .

CO2: to provide conceptual knowledge of entrepreneu ship

CO3: to understand the entrepreneurial oppurtunities in india and its development.

CO4: to familiarise with project and MSME's

CO5: to understand various entrepreneurial development policies and programmes

CO6: to understand concept of business ethics ,business standards and values.

COURSE OUTCOMES (CO)

Course Code :-BC307 **Program :- B.COM(CA)**
Semester – III
Course title :- Programming with C **HPW :- 4+2**
Credits – 5

CO1: To gain the skills of structured programming using C language

CO2: To introduce C language data types and I\O operations.

CO3: To familiarise with operators expressions and decision making.

CO4: To understand arrays and strings and its handling functions.

CO5: familiarise with built in functions and user defined functions .

CO6: to introduce structures and pointers.

Course Code :-BC401 Program :- BCOM(G&C.A) Semester –IV
Course title :- Practice of life insurance Credits – 2 HPW -2

CO1: to understand an overview of Indian insurance market and the plans of Life insurance.

CO2: to provide an insight into the different types of life insurance plans

CO3: To enable the students to understand the importance of nomination and assignments

CO4: to understand the importance of group insurance schemes,types and eligibility conditions

CO5: to have an idea about policy documents and assignment nomination and surrender of policy

CO6: to give an overview of policy claims.

Course Code :-BC404 Program :- B.COM(G&CA)
Semester –IV
Course title :- Corporate accounting HPW :- 5
Credits – 5

CO1: To acquire knowledge of AS-14 and preparation of accounts of banking and insurance companies.

CO2: Company liquidation : to familiarise students with the meaning statement of affairs and preparation ofliquidators final statement of accounts.

CO3: Amalgamation : to make the students understand the conceptand process of amalgamation accounting treatment in the books of transferor and transferee companies.
CO4: Internal reconstruction and acquisition of business: to acquient with the accounting treatment ofinternal reconstruction and acquisition of business with new set of booksand same set of books.
CO5: Accounts of banking companies: to know the books and registers to be maintained , and also legal provisions relating to final accounts with problems.

CO6: Accounts of insurance companies and insurance claims : to have knowledge on formats of revenue accounts,balance sheet ,general insurance and preparation of final accounts with special reference to fire and marine insurance including problems.

Course Code :-BC405 Program :- BCOM(G&CA)
Semester –IV
Course title :- Income Tax-II HPW :- 5
Credits – 5

CO1: To acquire conceptual and legal knowledge about income tax provisions relating to computation of Income from different heads with reference to an Individual Assessee

CO2: Capital Gains : To understand the following: Basic Concepts – which would elaborate on the meaning of charging section, transfer, capital asset, previous year, mode of computation, concept of indexation, cost of acquisition, cost of improvement, long term and short term capital asset etc.

CO3: Income from other sources: To understand deductions from Income from other Sources. • Conditions to be Fulfilled for Claiming the. Deductions. • Certain Amounts not Deductible (Section 58). • Profits Chargeable to Tax (Section 59)....

CO4: Clubbing and aggregation of income: To understand –. the methodology of set- off / carry-forward and set-off of losses. about inter-source adjustments and the cases where inter-source adjustment is not permitted.

CO5: Assessment of individuals: To expose the students to the latest provisions of Income Tax Act and To identify the Tax Planning and Assessment Procedures for Individuals.

CO6: Assessment Procedure: To understand types of Income tax assessment: types of returnsThe process of examination of ITR in the Department, rectification of mistakes etc.

Course Code :-BC406 **Program :- B.COM(G&CA)**

Semester –IV

Course title :- Business Statistics-II **HPW :- 4**

Credits – 4

CO1: To inculcate analytical and computational ability among the students.

CO2: · Regression analysis : The objective is to know the degree and direction of relationship, and is to estimate a dependent variable with the substitution of one or more independent variables.

CO3: Index numbers: To identify and use the following methods for construction of index numbers : (i) aggregate method (ii) simple and weighted index numbers.test of consistency etc.

CO4: Time series: to introduce components, methods ,semi and moving averages least square method deseasonalisation of data uses and limits of time series.

CO5: Probability : To define experiment, outcome, events, probability . basics of set theory permutation and combination and approaches and theorems to probability

CO6: Theoretical Distributions : To be familiar with the techniques of binomial ,poisson and normal distributions central limit theorem its characteristics and fitting a normal distribution..

Course Code :-BC407 **Program :- B.COM(CA)**

Semester –IV

Course title :- C++ **HPW :- 4+2**

Credits – 5

CO1: To know the meaning of object oriented programming language

CO2: To know the basic definition of classes and objects

CO3: To facilitate the students with the help of class create an object

CO4: To understand the concept of object oriented languages

CO5: To facilitate the students about concept of polymorphism

CO6: From object oriented concept student can handle the errors from exception handling techniques.

Course Code :-BC407 **Program :- B.COM(G)**

Semester – IV

Course title :- Financial statement analysis **HPW :- 4**

Credits –4

CO1: To present a broad understanding of financial statement analysis and learning the techniques involved

CO2: conceptual understanding of financial statements its features etc.

CO3: to understand the meaning, objectives, and various techniques involved .

CO4: practical orientation of computation of various ratios.

CO5: to familiarise with computation of funds flow analysis .

CO6: to familiarise with computation of cash flow analysis .

COURSE OUTCOMES (CO)

Course Code :-BC501 **Program :- B.COM(G&CA)**

Semester – V

Course title :- PRACTICE OF GENERAL INSURANCE **HPW :- 2**

Credits –2

:

1. Understand the meaning of insurance & how it is helpful in day to day life.

2. Explain about life insurance & General insurance concepts

3. Understand the importance of insurance in day to day life.

4. Understand the calculation of premiums for various insurance products.

5. Analyze the risk and the procedure to manage the risk in various situations.

6. Acquire knowledge about underwriting process & related claim processes

Course Code :-BC502 **Program :- B.COM(G&CA)**
Semester – V
Course title :- INTRODUCTION TO INDIAN ECONOMY **HPW :- 2**
Credits –2

1. Build An Overview of Indian Economy

2. Measure The Latest Developments In The Economy

3. Analyze Developmental Issues-Structural Changes In The Indian Economy

4. Demonstrate Policy Aspects of Indian economy.

Course Code :-BC503 **Program :- B.COM(G&CA)**
Semester – V
Course title :- COST ACCOUNTING **HPW :- 4**
Credits –4

1. Imbibe conceptual knowledge of cost accounting.

2. Select the costs according to their impact on business

3. Differentiate methods of schedule costs per unit of production and calculating stock consumption.

4. Identify the specifics of different costing methods and interpret the impact of the selected costs method

5. Apply cost accounting methods to evaluate and project business performance

6. Demonstrate mastery of costing systems, cost management systems, budgeting systems and performance measurement systems.

Course Code :-BC504 **Program :- B.COM(G&CA)**
Semester – V
Course title :- BUSINESS LAW **HPW :- 4**
Credits –4

1. Demonstrate, understand and communicate all the Legal Terminology of Business.

2. Understanding Development of Business Law in India

3. Outline Essentials of a valid Contract and agreements expressly declared to be void

4. Wagering Agreements from Contingent contracts and classify different modes of Discharge.

5. Acquire knowledge about Sale of Goods Act 1930 and Consumer Protection Act 1986

6. Explain Intellectuals Property Rights ,Information Technology Act & Environmental Protection Act.

Course Code :-BC505 **Program :- B.COM(G&CA)**
Semester – V
Course title :- BANKING THEORY&PRACTICE **HPW :- 4**
Credits –4

1. To understand the Origin and Growth of Banking in India
2. To know the role and functions of RBI.
3. Familiaize with different types of banks and their functions.
4. Understanding the Banker And Customer relationship
5. Classify and compare the Negotiable Instruments
6. Understand the different Loans and advances offered to the customers and evaluate their latest trends.

Course Code :-BC506 **Program :- B.COM(CA)**
Semester – V
Course title :- EXCEL FOUNDATION **HPW :- 4**
Credits –4

1. To familiarize oneself with Excel's 2013 basic features
2. Create and design a spreadsheet for general office& business use.
3. Demonstrate formatting techniques and presentation stylesincluding templates various tasks.
4. To manage the contents of cells and ranges within and between workbooks
5. Demonstrate how to secure information in an Excel workbook.
6. To use Print Preview to examine a spreadsheet before printing Excel worksheets with ease for presenting business reports

Course Code :-BC508 **Program :- B.COM(CA)**
Semester – V **HPW :-**
Course title :- WEB TECHNOLOGY **4T+2P**
Credits –5

1. Outline the history of the web, and technologies that makes the web pages and publishing them.
2. Make the web pages more dynamic and interactive.

3. Design to create structure of web page, to store the data in web document, and transport information through web.

4. Students are able to develop a dynamic webpage by the use of java script and DHTML.

5. Students will be able to write a well formed / valid XML document. 6. Implement the role of XML for the management and delivery of electronic information for given application.

Course Code :-BC506 **Program :- B.COM(G)**
Semester – V
Course title :- AUDITING **HPW :- 4**

Credits –4

1. Understanding Auditing as per AASB.

2. Explain the Qualification, Disqualification, Rights and Duties of an Auditor.

3. Describe Audit programme ,Audit Note Book ,Audit Working Notes and Audit Markings

4. Define Internal Audit and internal control, its meaning and objectives, types of Vouchers and its application.

5. Distinguish between Verification and Valuation of various Assets and Liabilities.

6. Describe the meaning and role of Audit Committee with reference to Audit Reports.

Course Code :-BC507 **Program :- B.COM(G&CA)**
Semester – V **HPW :-**
Course title :- COMPUTERISED ACCOUNTING **4T+2P**

Credits –5

1. Acquire the knowledge of computer software.

2. Understand the limitations of manual accounting and advantages of computerized accounting.

3. Integrate technical skills with financial accounting procedures.

4. Explain the process of maintaining inventory and day-to-day transactions in Tally accounting software.

5. Manage account receivables and payables in ERP.

6. Able to generate MIS reports

Course Code :-BC508 **Program :- B.COM(G)**
Semester – V
Course title :- ACCOUNTING STANDARDS **HPW :- 5**

Credits –5

1. Learn various Accounting Standards and its formulation.
2. Understand the Objectives, Benefits and limitations of AS
3. Developing a Road map for implementation of Indian AS
4. Applying the standards in accounting transactions and solving simple problems
5. Understand the benefits of IFRS 6. Analysing and integrating the Indian AS with IFRS.

COURSE OUTCOMES (CO)

Course Code :-BC601 **Program :- B.COM(G&CA)**
Semester – VI
Course title :- REGULATION OF INSURANCE BUSINESS **HPW :- 2**
Credits –2

1. Understand the Insurance Business ACT, 1972 and control regulation relating to general and life insurance.
2. Understand the Health Insurance Regulations, 2016 and know about the Health plus life combi products .
3. Understand the transfer of Insurance Policy and provision related to nomination and transfer.
4. Understand International Trends in Insurance Regulations.

Course Code :-BC602 **Program :- B.COM(G&CA)**
Semester – VI
Course title :- SECTORS OF INDIAN ECONOMY **HPW :- 2**
Credits –2

1. Students will know about the basics of Indian Economy.
2. Understand the Green Revolution and Legislation schemes.
3. Gain knowledge about Industries and Tertiary Sector in India.
4. Get an idea on financial relations between Centre and States.

Course Code :-BC603 **Program :- B.COM(G&CA)**
Semester – VI **HPW :-**
Course title :- THEORY AND PRACTICE OF GST **3T+2P**
Credits –4

1. Students will be equipped with the knowledge regarding theory and practice of GST.
2. Understand the hierarchy of applying Tax rate details.
3. Gain knowledge about GST adjustment and return filing.
4. Understand GST with regards to services.
5. Gain knowledge about recording advanced entries and migration to ERP.

Course Code :-BC604 **Program :- B.COM(G&CA)**
Semester – VI
Course title :- COMPANY LAW **HPW :- 4**
Credits –4

1. Understand the legal provision related to incorporation of companies
2. Understand the management of companies and corporate social responsibilities.
3. Gain knowledge about duties and liabilities of company secretary in practice.
4. Get clear understanding about company board meetings.
5. Understand legal provisions of winding up of companies in India as per Companies Act, 2013.

Course Code :-BC605 **Program :- B.COM(G&CA)**
Semester – VI
Course title :- MANAGERIAL ACCOUNTING **HPW :- 4**
Credits –4

1. Students will acquire knowledge about various concepts related to managerial accounting.
2. Understand the importance of managerial costing.
3. Acquire knowledge about managerial accounting decision making techniques and reporting methods.
4. Gain knowledge on budget and preparation of budgets.
5. Understand the importance of standard costing and variance analysis.

Course Code :-BC606 **Program :- B.COM(G&CA)**

Semester – VI **HPW :-**

Course title :- COMMERCE LAB **2T+4P**

Credits –4

1. Students will understand various business documents and acquire practical knowledge which improve overall skill and talent.
2. Students are acquiring knowledge about Finance, Banking and Insurance documents.
3. Gaining knowledge about various documents for Incorporation of company.
4. Knowing information about PAN, TAN, Form 16, TDS, IT payment challans, Refund order, notice under IT.
5. Students are acquiring knowledge about elements of business organization, purpose and powers and authorities like RBI, SEBI, IRDA, ROC.

Course Code :-BC607 **Program :- B.COM(G)**

Semester – VI

Course title :- FINANCIAL INSTITUTIONS & MARKETS **HPW :- 5**

Credits –5

1. Understand recent developments in Indian financial system
2. Students are acquiring knowledge about recent developments in Financial Institutions.
3. Gaining knowledge about Money Market Instruments.
4. RBI - Role of RBI, REPO and reverse REPO.
5. Understand about revolution of debt markets in India, Instruments and players in debt market .
6. Knowing about development of equity culture in India, and recent developments in Indian Stock Exchange.

Course Code :-BC608 **Program :- B.COM(G)**

Semester – VI

Course title :- ADVANCED CORPORATE ACCOUNTING **HPW :- 5**

Credits –5

1. Understand the various legal requirements of Holding Companies.
2. Accounting Treatment of Electricity Companies.
3. Students will get familiarized with the concept of accounting for price level changes.
4. Understand the technology of Lease Account and the types of Lease.
5. Gain knowledge of HRA and SRA.

B.COM

PROGRAM OUTCOMES

- Ability to build a strong foundation of knowledge in different courses of their study
- Ability to apply critical thinking, decision making, and reasoning skills in the process of quality education
- Ability to develop an attitude for working effectively and efficiently in any competitive environment.
- Ability to use current techniques, skills, and tools in the field of ICT
- Develop employability skills , computer skills and use of electronic media
- Develop moral values and ethics
- Understand the responsibility towards the community and society and volunteer their services

PROGRAM SPECIFIC OUTCOMES (PSOs)

BCOM (G&CA)

PSO1: To blend theoretical knowledge with practical skills in business to prepare the youth to attain holistic approach and eventually occupy key managerial positions in accounting, finance, international business, taxation, besides general management

PSO2: To provide students with the knowledge, tools of analysis and skills with which to understand and participate in the modern business and economics world, to prepare them for subsequent graduate studies and to archive success in their professional carriers.

PSO3: Analyse commerce/business issues in the international contexts and compare international contexts and issues through the lens of commerce disciplines.

PSO4: Work competently and productively in groups, exercising team work and interpersonal skills and qualify for employment in a wide range of occupations.

B.Sc. I YEAR

SEMESTER-I

Code	Course Title	Course Type	HPW	Credits
BS104	Chemistry Of Biomolecules	DSC-1A	4T +2P = 6	4+1=5

COURSE OUTCOMES

After studying this paper, biochemistry graduate students will be able to:

- ✓ Understand biochemistry at the atomic level, draw molecules and reactions involved with biomolecules.
- ✓ know the various weak acids and bases,biological buffers present in our body
- ✓ Learn the molecular structures of 20 amino acids, differentiating essential and non-essential amino acids, biologically important modified amino acids and their functions.
- ✓ Recognize the structural levels of organization of proteins,3D structure of proteins, its functions, denaturation (hemoglobin, myoglobin etc.).
- ✓ Understand the difference between monosaccharides,disaccharides and polysaccharides.storage and structural polysaccharides.
- ✓ Have a clear picture of biomembranes,behavior of amphiphatic lipids in water,formation of micelles,bilayers,vesicles,membranecomposition and fluid mosaic model
- ✓ Recognize lipid and porphyrin structures, lipoproteins and functions of prostaglandins.
- ✓ Describe how lipids, cholesterol, prostaglandins etc. are synthesized, emphasizing the genetic defects of lipid metabolism.
- ✓ Understand the relationship between the properties of macromolecules and cellular activities, cell metabolism and chemical composition.
- ✓ Learn the molecular structures of 20 amino acids acid base properties, differentiating essential and non-essential amino acids, biologically important modified amino acids and their functions.

SEMESTER-II

Code	Course Title	Course Type	HPW	Credits
BS204	**Chemistry Of Nucleic Acids & Biochemical Techniques**	**DSC-1B**	**4T +2P = 6**	**4+1=5**

COURSE OUTCOMES

After studying this paper, biochemistry graduate students will be able to:

- ✓ Understand biochemistry at the atomic level, draw molecules and reactions involved with biomolecules.
- ✓ To know the various structures of DNA ,RNA ,nucleosides and nucleotides.
- ✓ Learn the molecular structures of DNAdouble helix ,denaturation , biologically importance of RNA, types of RNA and their functions.
- ✓ Recognize the reassociation kinetics,cot curves and their significance.find the Tm values ,hyperchromic effect.
- ✓ Understand the difference between colorimetry and spectroscopy,Beer Lamberts law and its limitations.
- ✓ To study the principles involved in flourimetry and centrifugation.
- ✓ To have a clear picture of principles and instrumentation in TLC,paper chromatography,gel filtration,ion-exchange and affinity chromatography.
- ✓ Describe/recognize photochemical and spectral characteristics of nucleic acids.
- ✓ Understand the relationship between laws of absorption and molar extinction coefficient.

B.Sc. II YEAR

SEMESTER-III

Code	Course Title	Course Type	HPW	Credits
BS 304	Bioenergetics, Biological oxidation and Enzymology	DSC- 1C	4T +2P = 6	4+1=5

COURSE OUTCOMES

After studying this paper, Biochemistry Graduate students will be able to:

- ✓ Describe structure, functions and the mechanism of action of enzymes. Learning kinetics of enzyme catalysed reactions and enzyme inhibitions and regulatory process. Ability to perform immobilization of enzymes. Exposure of wide applications of enzymes and future potential.
- ✓ Understand the fundamental energetics of biochemical processes, chemical logic of metabolic pathways. Knowing in detail about concepts to illustrate how enzymes and redox carriers and the oxidative phosphorylation machinery occur.
- ✓ Understand the utilization of proton gradient to drive the formation of high energy bonds and high energy compounds.
- ✓ To provide a deeper insight in to the fundamentals of enzyme structure and function and kinetics of soluble and immobilized enzymes. Discussion on current applications and future potential of enzymes.
- ✓ Complete understand of rate of reactions and order of reactions, and inhibitions and their kinetics.To gain knowledge on enzyme catalysis and isoenzymes and and on multienzyme complexes.
- ✓ Understanding the concepts of standard redox potential and the enzymes in biological oxidations. A brief account of Mitochondria and chloroplast structure, ATPase (oxidative phosphorylation) and C3 and C4 cycles in plants.

Code	Course Title	Course Type	HPW	Credits
BS 301	Computational Biochemistry	SEC -1	2	2

COURSE OUTCOMES

By the end of this course the student will able to learn:

- To have basic knowledge of Modern Biology and Genomics.
- Introduction to tools of Bioinformatics
- To understand the advantages and disadvantages of different machine learning techniques in bioinformatics.
- To understand how theoretical approaches can be used to model and analyze complex biological systems.
- The student can explain which type of data can be available from the most common protein sequence and structure data bases like UNIPROT and CATH, Genbank.
- The student can explain principles of computational methods for the prediction of secondary structures, elements from protein sequence, homology modeling

SEMESTER-IV

Code	Course Title	Course Type	HPW	Credits
BS 404	Intermediary Metabolism	DSC-1D	4	4

COURSE OUTCOMES

By the end of the course the students will able to learn:

- The student will be able to explain the general design of metabolic pathways based on Bio Energetic principles.
- Describe how carbohydrates (glucose & glycogen), lipids (fatty acids , TAG), nucleic acids are synthesized, degraded and regulated and the role of enzymes
- Have a holistic view on metabolism & recognize how different pathways are functionally interlinked & how they are regulated by intracellular and extracellular signals.
- Recognize How metabolism can be related to related to issues in lifestyle, health, disease.
- To study the Inborn errors of metabolism (Gout, Maple syrup disease)

Code	Course Title	Course Type	HPW	Credits
BS 401	Medical Lab Technology	SEC-2	2	2

COURSE OUTCOMES

By the end of the course the students will able to learn:

- To compare and contrast clinical laboratory procedures, interpret data & predict the pathogen isolated.
- To distinguish normal and abnormal microscopic characteristics of blood cells through performance of complete blood count.
- Compare different antibiotic susceptibility test methods, interpret results of antimicrobial susceptibility tests.
- Demonstrate technical skills by following established procedures &Processing biological specimen analysis.
- To study the Importance of Biomarkers and to Correlate laboratory detection of tumour markers with cancers and metastatic disease.

SEMESTER-V

Code	Course Title	Course Type	HPW	Credits
BS 506A	Molecular Biology	DSE-1E	3	3

COURSE OUTCOMES

By the end of the course the students will able to learn:

- To understand the basic concepts like gene , Genome , Chromosome and their structures and organization in both prokaryotes and eukaryotes
- To study and understand why nucleic acid is called Genetic material.
- To know different steps in the central dogma of molecular biology, enzymes involved in synthesis of DNA, RNA and protein.
- Learn the basic steps involved in DNA replication in prokaryotes emphasizing the enzymes involved in different types of replication.
- To learn the events in the synthesis of RNA in both prokaryotes and eukaryotes, their regulation, and post transcriptional modifications.
- To study about the genetic code, and its nature
- To learn the mechanism involved in the protein synthesis and the modification seen on the protein after its synthesis.
- To understand the concept of operon and understand their functioning with lac and trp operons.

Code	Course Title	Course Type	HPW	Credits
BS 503	Physiology and clinical Biochemistry	DSC-1E	3	3

COURSE OUTCOMES

By the end of the course the students will able to learn:

After studying this paper, biochemistry graduate students will be able to:

- ✓ Understand biochemistry and patho physiology associated with performed in Clinical biochemistry laboratory.
- ✓ Have a good knowledge on Nervous & Muscular systems helps in add on courses such Acupuncture, Physiotherapy.
- ✓ Understand the nutritional requirements and the role of food and nutrients in health and disease processes and describing the methods used to carry out nutritional methods.
- ✓ Understand the clinical history perform physical examination, suggest investigations, interpret the results and documentary findings.
- ✓ To understand how living systems function from molecular and cellular to be systems level emphasizing an integrative approach to study the biological approach of the human body.
- ✓ To understand the relationship between food and a healthy body more specifically emphasizing on how nutrients are digested, absorbed, transported and metabolized, stored and eliminated by the body.

III YEAR (ANNUAL PATTERN)

Code	Course Title	Course Type	HPW	Credits
P-III	Physiology, Immunology and clinical biochemistry	Yearwise	3	

COURSE OUTCOMES

After studying this paper, biochemistry graduate students will be able to:

- ✓ Understand biochemistry and patho physiology associated with performed in Clinical biochemistry laboratory.
- ✓ Have a good knowledge on Nervous & Muscular systems helps in add on courses such Acupuncture, Physiotherapy.
- ✓ Understand the nutritional requirements and the role of food and nutrients in health and disease processes and describing the methods used to carry out nutritional methods.
- ✓ Understand the clinical history perform physical examination, suggest investigations, interpret the results and documentary findings.
- ✓ learn about the structural features, functions of the components of immune system, involved in immune system. emphasizing the mechanisms
- ✓ To understand how living systems function from molecular and cellular to be systems level emphasizing an integrative approach to study the biological approach of the human body.
- ✓ To understand the relationship between food and a healthy body more specifically emphasizing on how nutrients are digested, absorbed, transported and metabolized, stored and eliminated by the body.

Code	Course Title	Course Type	HPW	Credits
P-IV	Microbiology & Molecular Biology	Yearwise	3	

COURSE OUTCOMES

After studying this paper, biochemistry postgraduate students will be able to:

- ✓ Understand the morphological differences of different microorganisms,identifying industrially and economically useful microorganisms and applying them in different fields.
- ✓ Understanddifferent steps in the central dogma of molecular biology, enzymes involved in synthesis of DNA, RNA and protein.
- ✓ Present hypothesis and select, adapt and conduct molecular and cell-based experiments to either confirm or reject the hypothesis.
- ✓ Exhibit a knowledge base in genetics, cell and molecular biology.
- ✓ Learn gene cloning for the expression of desired gene, amplifying the DNA, which is applied in various genomic level researches.
- ✓ Learn fundamental genetic, biotechnology principles and practices and apply that to analyze and manipulate traits in living organisms.
- ✓ Describe the contents and properties of the most important bioinformatics databases, perform text-and searches, and analyze and discuss the results in light of molecular biological knowledge.
- ✓ Understand the intersection of life and information sciences, using different software's like genomics, proteomics, BLAST, FASTA etc to extract information from large database and applying them at genome level.

COURSE OUTCOMES (CO)

Course Code :-BS104 Program :- B.Sc.(B.Z.C.)
Semester – I Course title :Botany-I HPW :- 4+2
Credits – 5

CO1:1.Brief account of Archaebacteria, Actinomycetes.
2.Cyanobacteria General characters,cell Structure ,thallus organisation and their significance as biofertilizers with special reference to oscillatoria, nostoc and anabaena.

CO2:1.Viruses:structure,replication and transmission,plant diseases caused by viruses and their control with reference to tobacco mosaic and rice tungro.
2.Bacteria:Structure, nutrition,reproduction and economic importance.An outline of
Plant diseases of important crop plants caused by bacteria and their control with reference to Angular leaf spot of cotton and bacterial blight of rice.
3.General account of mycoplasma with reference to little leaf of brinjal and papaya leaf curl.

CO3:1.General Characters,Structure,reproduction and classification of algae(Fritsch) and thallus organization in algae.
2.Structure and reproduction of the following.
Chlorophyceae-volvox, oedogonium and chara.
Phaeophyceae-Ectocarpus.
Rhodophyceae-Polysiphonia.

CO4:1.General Characters and classification of fungi(Ainsworth).
2.Structure and reproduction of the following.
(a)Mastigimycotina-Albugo
(b)Zygomycotina-Mucor
(c)Ascomycotina-Saccharomyces and Penicillium.
(d)Basidiomycotina-Cercospora.
(e)Deuteromycotina-Cercospora.

CO5:1.Economic importance of fungi in relation to mycorrhizae and mushrooms.

CO6:General account of mushroom cultivation.

Course Code :-BS204 Program :- B.Sc.(B.Z.C.)
Semester –II
Course title :- Botany-II HPW :- 4+2
Credits – 5

CO1:1.Bryophytes:General Characters and Classification.
2. Structure, reproduction, life cycle and systematic position of marchantia, Anthoceros and polytrichum.(Development stages are not required).
3.Evolution of sporophyte in bryophytes.

CO2:1.Pteridophytes:General Characters and classification(sporne,s)
2.Structure, reproduction,life cycle and systematic position of rhynia, Lycopodium,
Equisetum and marsilea.
3.Stelar evolution,heterospory andseed habit in pteridophytes.

CO3:1.Gymnosperms:General Characters,structure,reproduction and classification (Sporne,s)
2.Distribution and economic importance of Gymnosperms.
3.Morphology of vegetative and reproductive parts,systematic position and life cycle
Of pinus and gnetum.

CO4:1.Palaeobotany:Intrduction,fossils and fossilization,Importance of fossils.

CO5:2.Geological time scale,

CO6:Bennettitales:General account.

COURSE OUTCOMES (CO)

Course Code :-BS304 Program :- B.Sc(B.Z.C)
Semester – III
Course title :- Botany-III HPW :- 4+2
Credits – 5

CO1:1.Introduction:Principles of plant systematic,Types of classification:Artificial,Natural and phylogenetic,systems of classification:Salient features and comparative account of Bentham& hooker and Engler&Prantle.An introduction to Angiosperm Phylogeny Group(APG).
2.Current concepts in Angiosperm Taxonomy:Embroyology in relation to taxonomy,
Cytotaxonomy,Chemotaxonomy and Numerical Taxonomy.

CO2:Systematic study and economic importance of plant belonging to the following
families:Polypetalae:Annonaceae,Capparidaceae,Rutaceae,Fabaceae(Faboideae/papilionoideae,Caesalpinioideae,Mimosoideae),Cucurbitaceae

CO3:1.Ethnomedicine:Scope, interdisciplinary nature, distinction of Ethnomedicine from folklore medicine.
2.Outlines of Ayurveda,Sidda,Unani and Homeopathic systems.

CO4:Traditional medicine vs modern medicine: study of selected plant examples used in
Traditional medicine as resource.

CO5:Pharmacognosy:Introduction and scope.

CO6:Plant crude drugs:types, methods of collection,

Course Code :-BS404 Program :- B.Sc.(B.Z.C.)
Semester –IV
Course title :- Botany-IV HPW :- 4+2
Credits – 5
CO1:To know about meristems: types histological organization of shoot and root apices and theories.

CO2:Stem and root anatomy: Vascular cambium- formation and function.

CO3:Introduction: History and importance of Embryology.

CO4:Pollination- types,pollen- pistil interation. Fertilization.

CO5:Endosperm-Development and types.

CO6:Palynology-Pollen morphology, NPC system and application of palynology.

Department of Chemistry
COURSE OUTCOMES/LEARNING OUTCOMES

- Graduating national provisionally qualified Personal who are necessary for the service of the community and the government plans and programs of development, education and industry within the Kingdom.
- Conducting academic and industrial scientific research necessary to improve the quality of live for the people of the region.
- Contributing to the improvement of the public at the scientific cultural awareness via the academic conferences and workshops.

Semester - I

S1-CO1

Describe the General properties of S block elements and Diagonal relationship between Li-Mg and Be - Al

S1-CO2

Describe the synthesis, Structure, Reactivity & applications of the various types of B, C ,Si & N compounds.

S1-CO3

By considering principles of solubility product & common ion effect cation can be discriminated by anions in a salt mixture

S1- CO4

Based on bond polarization acidity & basicity & stability of reactive intermediate of different hydro carbon's can be determined

S1-CO5

Have an idea of critical & van der waals constant, the law of corresponding states, reduced equation of states and liquefaction of gases

S1- CO6

Describing the physical and chemical properties of liquids and their applications

S1-CO7

Explain how electron exbiting dual behavior by Planck's radiation and photo electric effect, Compton effect and De Broglie hypothesis and Heisenberg Un certainty principle. By taking the criteria of wave function particle in a 1D box can be explained by Schrodinger's wave equation

S1-CO8:

Predict the bond order & magnetic behavior for various molecules on the basis of MOED.

S1-CO9

In a given, mathematical data, accuracy, precision & error can be explained.

Semester II

S2-CO1

Able to understand the physical and chemical properties of oxides

Oxy- acids of P- block elements

S2 – CO2

Acquire the knowledge of Preparation, structure and reactivity of inter halogen compounds

S2-CO3

The study of oxides, halides and oxy halides of Xe compounds

S2-CO4

Study of general properties, variable oxidation states of d-block elements and their special properties, triads etc..

S2-CO5

Acquire Knowledge about various preparation and chemical reactivity of aromatic Compounds, halogen compounds and alkyl benzene.

S2-CO6

Predicting the symmetry elements in various crystal lattices, the aromaticity of aromatic compounds can predicted by Huckel's rule.

S2- CO7

By kinetic study one can judge the order of reaction of halogen compound & by taking criteria of optical activity one can express the stereochemistry of SN1 &SN2.

S2-CO8

The study of colligative properties helps to determine molecular
masses of solutes ,Nernst distribution law used to determine association
& dissociation of solute in solvent

S2-CO9

Describes Laws of crystals. By using Bragg's equation various crystal structure can be determined

S2-CO10

By quantitative analysis one can determine the weight of chemical substances

S2-CO11

Band theory is useful to differentiate between conductors, insulators &semiconductors. Have an idea about material science

S2-CO12

The study of different types of materials, their physical and general properties and their applications

Semester III

S3 CO1:

Describe the position and properties of Lanthanides and Actinides, separation methods of lanthanides and comparison of lanthanides and actinides. To analyze the various reactions in liquid ammonia and hydrogen fluoride.

S3CO2

Explain the symmetry elements, operations in molecules with examples.

S3CO3:

Discover the methods of preparation and properties of alcohols, ethers , epoxides and carbonyl compounds

S3CO4:

Describe Gibb's and project the Phase equilibria of one component and two component system, compound with congruent and incongruent melting point. Explain the properties of colloids; explain the preparation of emulsifiers and Gels.

S3CO5

Analyze adsorption isotherms and its industrial applications to reduce pollution and compute the surface area of adsorbent isotherms and its industrial applications to reduce pollution and compute the surface area of adsorbent.

S3CO6 :

Attain the knowledge of colloids and surface chemistry and its industrial applications to reduce pollution and compute the surface area of
Adsorbent

S3CO6:

Describe the structure and properties of grapheme, fullerenes, and carbon nano tubes. Understand the synthetic techniques of Nano structured materials, its current applications.

S3 CO7 **:**

Classify constitutional and stereoisomers isomers; explain optical activity and chiral molecules.

S3CO8**:**

Interpret D, L & R,S configuration for asymmetric and dissymmetric molecules. Analyze the conformations of simple organic molecules.

S3 CO9

Describe the Conformations of simple organic molecules.

Semester IV

S4CO1

Explain the IUPAC Nomenclature rules, review Werner's theory, Sedgwick's electronic interpretation and VBT theory.

Application of VBT to Tetrahedral and Octahedral complexes

S4CO2

Identify isomerism in Coordination compounds and explain various isomerism using suitable examples.

S4CO3

Classify, synthesize organometallic compounds of Li Mg Al and ferrocene. Discuss their applications

Discuss various metal carbonyls, their structure and properties.

S4CO4

Comprehend the preparation methods and its synthetic applications in industry of carboxylic acids and carbanions.

S4CO5

Explain all the named reactions and the reaction mechanisms of carboxylic acids and nitro hydro compounds and focus on its industrial applications.

S4CO6

Acquire knowledge on Hirttof's method, Kholrausch law, Arrhenius theory, Ostwald dilution law, Debye Hackle Onsager equation and predicts its applications.

S4CO7

Accomplish the Nernst equation, EMF of a cell, Single electrode potential, Standard hydrogen electrode, and electrochemical series.

Semester V

S5CO1

Understand the theories & properties of coordination compounds and stability of metal complexes.

S5CO2

List and judge the applications of coordination compounds in various fields

S5CO3

Know structures of Borane and carborane clusters

S5CO4

Compare the property and reactivity of different class of amines and design the synthesis pathway of different organic compounds using amines

S5CO5

Classify heterocyclic compounds and compare their aromatic character and reactivity

S5CO6

Develop concept on reaction kinetics with special reference to factors influencing the rate and evaluate the merits of different theories of reaction rate

S5CO7

Know about electromagnetic radiation and understand the interaction of electromagnetic radiation with molecules - various types of molecular spectra

S5CO8

Learn to analyze the consequences of light absorption with reference to various photo physical processes and photochemical reactions with normal and abnormal quantum yield.

Semester V (Paper - VI)
Elective – A

S6CO1

Obtain the knowledge of principle and methods of solvent extractions and their application, determination of iron..

S6CO2

Describe the classification of Chromatographic methods, principle, nature of adsorbents and solvent systems.

S6CO3

Analyze the Principle, Instrumentation and application of TLC, Paper chromatography, Column chromatography, IEC, GC, HPLC techniques.

S6CO4

Describe the general features of absorption, its laws.

S6CO5

Apply the Knowledge of Instrumentation of Spectrophotometry, its principle and with their application in estimation of Iron, Chromium and Manganese in Steel.

S6CO6

Understand the various types of electro -analytical methods.

S6CO7

Describe the principles, types of electrodes used and applications of potentiometry, Voltametry and conductometry.

S6CO8

Able to understand the various types of conductance and conductivity measurements. Analyze various conductivity measurements and applications of conductivity measurements.

Semester VI (Paper - VII)

S7CO1

Define labile and inert complexes. Explain the concept of Inorganic reaction mechanism with respect to octahedral and tetrahedral complexes.

S7CO2

Analyze the Biological significance of essential elements and toxicity of heavy metals

S7CO3

Attain the knowledge about carbohydrate chemistry with reference to definition, classification and evaluation of structure from reactions.

S7CO4

Understand the chemistry of amino acids – essential amino acids, Biological importance. Learn to relate the peptide bond formation for the synthesis of protein

S7CO5

To attain an extensive knowledge on Thermodynamics with reference to different Thermodynamic functions, processes, work of expansion and laws of Thermodynamics

S7CO6

Analyze the applications of Thermodynamics in basic sciences for deriving equations, in engineering science for calculating efficiency of machine and evaluation of spontaneity of process. Learn to derive the equation of spontaneity, Gibb's equation and Maxwell's relations

S7CO7

Describe the principle of Nuclear Magnetic Resonance, concept of chemical shift and splitting of signals – spin –spin coupling. Implement the concept in analyzing the NMR spectrum for identification of organic compounds

S7CO8

Analyze the basic principle of mass spectrometry, explain nitrogen rule and learn to determine the mass spectral pattern of different organic compounds like ethyl bromide and acetophenone.

B. Sc Chemistry - Semester VI (Paper - VIII)
Elective - B

S8 CO1

Understood how the Pesticides are effecting the environment and their formulations and synthesis

S8CO2

Know about the terminology in medicinal chemistry and Nomenclature of Drugs.

S8CO3

Acquire the knowledge about different types of Fertilizers, synthesis and uses

S8CO4

Describing the sources of Energy and extraction and applications of Coal

S8CO5

Got the idea of extraction of Petroleum from crude oil by Fractional distillation and its applications

S8CO6

Learned the classification, Properties and Functions of lubricants

Department of ComputerScience and Applications

COURSE OUTCOMES / LEARNING OUTCOMES

B.SC SEMESTER I

Programme	B.Sc
Course Title	Programming in c
Course Code	BS106
Credits	5

Course Objectives:

- To understand the basic concepts of the C Programming Language.
- To analyze and evaluate the algorithm into program code with solution.
- To write C program using arrays, pointers,structures and files.

Career Outcomes:

On Successful completion of this course, learners will be able to:

CO 1	Apply C Language basic concepts in constructing simple programs.
CO 2	Be able to write the program, edit, compiler, debug, correct, recompile and run in c.
CO3	To design an algorithm for the given problem.
CO4	To write a C program for a given algorithm
CO 5.	Construct Top down structured c Program using functions
CO 6	Explain file handling concept for input and output processing
CO 7	Explain the pointers concept for Dynamic Memory Management
CO 8	Ability to develop and execute C Programs

BSC SEMESTER II

Programme	B.Sc
Course Title	Programming in C++
Course	BS206

Code	
Credits	5

Course Objectives:

- To understand Object-oriented Programming concepts in developing solutions.
- To learn features of C++ language including Templates and Exceptions.
- Understand and learn to build C++ classes.
- Understand the advanced C++ features such as composition of objects, operator overloading, dynamic memory allocation, inheritance, polymorphism, file I/O, exception handling etc.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Apply C++ language basic concepts in construction simple programs.
CO2	Relate object and class concept to real world entities.
CO3	To write programs for Object oriented concepts such as encapsulation, inheritance and polymorphism.
CO4	Explain file handling concept for input and output processing.
CO5	Ability to write programs for exception handling in C++.
CO6	Develop and execute C++ programs in the lab for every concept.
CO7	Ability to design and implement programs for real time complex problems.

BSC SEMESTER III

Programme	B.Sc
Course Title	Data Structure using C++
Course Code	BS306
Credits	5

Course Objectives:

- To introduce the fundamental concepts of data structures, abstract data types and analysis of algorithms

- To understand the implementation of linear data structures such as stacks, queues, linked lists and their applications.
- To understand the implementation of different non-linear data structures such as trees and graphs
- To understand various search techniques such as hashing, binary search trees
- To understand and evaluate different sorting techniques and analyze their time complexities

Course Outcomes:

On Successful completion of this course learners will be able to

CO1	Ability to explain the basic operations on linear structures such as arrays, stacks, queues and linked lists.
CO2	Ability to explain the concept of non linear structures such as trees and graphs
CO3	Ability to explain and evaluate search techniques
CO4	Ability to explain sorting algorithms
CO5	Analyze the efficiency sorting algorithms
CO6	Develop and execute code for various sorting and search techniques
CO7	Be able to understand hierarchical representation of data using trees

BSC SEMESTER IV

Programme	B.Sc
Course Title	Database Management System
Course Code	BS406
Credits	5

Course Objectives:

- To understand the different issues involved in the design and implementation of a database system.
- To study the physical and logical database designs, database modeling, relational, hierarchical, and network model.
- To understand and use data manipulation language to query, update and manage a database.
- To develop an understanding of essential DBMS concepts such as : data security, integrity, concurrency, distributed database, and intelligent database, client/server, Data warehousing.

Course Outcomes:

On Successful completion of this course learners will be able to

CO1	Differentiate database systems form file systems by enumerating the features provide by database systems
CO2	Able to understand various data models and differentiate changes happened from one model to the other model
CO3	Use and SQL to create, secure, maintain and query a database
CO4	Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database
CO5	Get more popularize with single user databases and distributed databases
CO6	Be familiar with the basic issues of transaction processing and concurrency control

BSC SEMESTER V

Programme	B.Sc
Course Title	Software Engineering
Course Code	BS506 (B)
Credits	4

Course Objectives:

- To Acquire the knowledge of different types of models used in software
- To explore the knowledge in software testing
- To know the concepts of process
- To understand the knowledge of implementation and maintenance of software
- To create UML diagrams

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Design a software , component, or process to meet desired needs with realistic constraints
CO2	Acquire knowledge of different types of software models with real world examples
CO3	Acquire knowledge of software maintenance in divers environments and managing projects verification, validation using various testing methods
CO4	Analyze, design, implement, verify, validate apply and maintain software systems or parts of software systems

BSC SEMESTER V

Programme	B.Sc
Course Title	Programming in Java

Course Code	BS505
Credits	4

Course Objectives:

- To understand the basic concepts of the object oriented programming language.
- To analyze and evaluate the programs of inheritance, method overloading, Constructors, Threads , interface etc.
- To understand the concepts of Applets and stream classes ,packages.
- To learn the AWT controls and menus.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Acquire knowledge of the features of Java and basic concepts of oops.
CO2	Understand the inheritance concepts of the java language and write simple programs.
CO3	Learn the concept of interface and packages.
CO4	Learn the essentials of Exception handling, Applet and concept of stream classes.
CO5	Understand the concept of AWT controls and Menus.

BSC SEMESTER V

Programme	B.Sc
Course Title	Computer Organization(SEC)
Course Code	BS502
Credits	2

Course Objectives:

- To understand the basic concepts of Latches, Flipflops and Circuits.
- To understand and learn the Registers and Counters.
- To understand the Sequential Circuits Design and circuits for Arithmetic Operations.

Course Outcomes:

On Successful completion of this course learners will be able to

CO1	Ability to explain the basic concepts of Set-Reset Latches, Edge Trigger,D-Flipflop,S-R Flipflop, Asynchronous Sequential Circuits.
CO2	Ability to explain Registers and Counters.
CO3	Ability to explain the Sequential Circuit Design and circuits for Arithmetic Operations.
CO4	Ability to explain the SemiAdder with Accumulator.

BSC SEMESTER V

Programme	B.Sc
Course Title	Information Technology(GE)
Course Code	BS501
Credits	2

Course Objective:

- Understand the meaning and basic components of a computer system.
- To learn generation, classification and application of computers.
- Knowledge of computer equipment, including both hardware and software.
- To learn input devices and output devices in detail.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Exploring the components and working principles of computer
CO2	Understand how the graphical data stored in memory and processing textual data
CO3	Get to know about memory units and output devices
CO4	Learn about computer software and network concept
CO5	Gain knowledge about internet, email and use of computer in business
CO6	Explore the features of Operating System and get to know about the Functions and Types.

BSC SEMESTER VI

Programme	B.Sc
Course Title	Computer Networks
Course Code	BS605
Credits	5

Course Objectives:

- Knowledge of basic introduction to networking.
- To understand the concepts of OSI Reference Model.
- To understand the different types of algorithms used in networking.
- To acquire the knowledge of transport layer.
- To acquire the knowledge of routers and IP in network layer.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Demonstration of application layer protocols.
CO2	Discuss Transport Layer Services and understand UDP and TCP Protocols:
CO3	Explain routers, IP and routing algorithms in network layer:
CO4	Illustrate concepts of multimedia networking, security and network management

BSC SEMESTER VI

Programme	B.Sc
Course Title	Web Technologies
Course Code	BS606
Credits	4

Course Objective:

- To understand the concepts of Html, Tags, Lists , Tables , Forms , Frames etc.
- To understand the various attributes and different styles used in CSS.
- To understand the concept of JavaScript and their program.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Apply a structured approach to identify needs, interests and functionality of a website.
CO2	Different ways to select and style HTML elements using CSS.
CO3	Students are able to develop a dynamic web page by the use of Javascript and DHTML.
CO4	HTML tags and how to use them to start building our web pages.
CO5	Students will be able to write a well formed/valid XML elements.
CO6	Create an active server application using web server.

BCOM SEMESTER I

Programme	B.Com
Course Title	Fundamentals of Information Technology
Course Code	BC107
Credits	4

Course Objective:

- Understand the meaning and basic components of a computer system.
- To learn generation, classification and application of computers.
- Knowledge of computer equipment, including both hardware and software.
- To learn input devices and output devices in detail.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Exploring the components and working principles of computer.
CO2	Understand how the graphical data stored in memory and processing textual data.
CO3	Get to know about memory units and output devices.
CO4	Learn about computer software and network concept.
CO5	Gain knowledge about internet, email and use of computer in business.
CO6	Explore the features of MS Office and get to know about the tools.

BCOM SEMESTER II

Programme	B.Com
Course Title	RDBMS
Course Code	BCC207
Credits	4

Course Objectives:

- To understand the different issues involved in the design and implementation of a database system.
- To study the physical and logical database designs, database modeling, relational, hierarchical, and network model.
- To understand and use data manipulation language to query, update and manage a database.
- To develop an understanding of essential DBMS concepts such as : data security, integrity, concurrency, distributed database, and intelligent database, client/server, Data warehousing.

Course Outcomes: On Successful completion of this course learners will be able to:	
CO1	Differentiate database systems form file systems by enumerating the features provide by database systems.
CO2	Able to understand various data models and differentiate changes happened from one model to the other model.
CO3	Use and SQL to create, secure, maintain and query a database.
CO4	Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database.
CO5	Get more popularize with single user databases and distributed databases.
CO6	Be familiar with the basic issues of transaction processing and concurrency control.

BCOM SEMESTER III

Programme	B.Com
Course Title	Programming with c
Course Code	BCC307
Credits	4

Course Objectives:

- To understand the basic concepts of the C Programming Language.
- To analyze and evaluate the algorithm into program code with solution.
- To write C program using arrays, pointers, structures and files.

Career Outcomes: On Successful completion of this course learners will be able to:	
CO 1	Apply C Language basic concepts in constructing simple programs.
CO 2	Be able to write the program, edit, compiler, debug, correct, recompile and run in C.
CO3	To design an algorithm for the given problem.
CO4	To write a C program for a given algorithm.
CO 5	Construct Top down structured C Program using functions.
CO 6	Explain file handling concept for input and output processing.
CO 7	Explain the pointers concept for Dynamic Memory Management.
CO 8	Ability to develop and execute C Programs.

BCOM SEMESTER IV

Programme	B.Com
Course Title	OOP with C++
Course Code	BCC407
Credits	4

Course Objectives:

- To understand Object-oriented Programming concepts in developing solutions.
- To learn features of C++ language including Templates and Exceptions.
- Understand and learn to build C++ classes.
- Understand the advanced C++ features such as composition of objects, Operator overloading, Dynamic memory allocation,Inheritance, Polymorphism, File I/O, Exception Handling etc.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Apply C++ language basic concepts in construction simple programs.
CO2	Relate object and class concept to real world entities.
CO3	To write programs for Object oriented concepts such as Encapsulation, Inheritance and Polymorphism.
CO4	Explain file handling concept for input and output processing.
CO5	Ability to write programs for exception handling in C++.
CO6	Develop and execute C++ programs in the lab for every concept.
CO7	Ability to design and implement programs for real time complex problems.

BCOM SEMESTER V

Programme	B.Com
Course Title	Web Technology
Course Code	BCC508
Credits	5

Course Objective:

- To understand the concepts of Html, Tags, Lists , Tables , Forms , Frames etc.
- To understand the various attributes and different styles used in CSS.
- To understand the concept of JavaScript and their program.

Course Outcomes: On Successful completion of this course learners will be able to	
CO1	Apply a structured approach to identify needs, interests and functionality of a website.
CO2	Different ways to select and style HTML elements using CSS.
CO3	Students are able to develop a dynamic web page by the use of JavaScript and DHTML.
CO4	HTML tags and how to use them to start building our web pages.
CO5	Students will be able to write a well formed/valid XML elements
CO6	Create an active server application using web server

BCOM SEMESTER V

Programme	B.Com
Course Title	Excel Foundation
Course Code	BCC506
Credits	4

Course Objective:

- To understand the Advanced version of Excel 2013.
- To learn the advanced features of Excel 2013 such as protect. workbooks, Vlookup, Hlookup.
- To understand Pivot Tables.

Course Outcomes: On Successful completion of this course learners will be able to:	
CO1	Create a workbook, enter data in a worksheet.
CO2	Format a worksheet, format numbers in a worksheet, create an Excel table, filter data by using an Auto filter.
CO3	Apply conditional formatting.
CO4	Print a worksheet, using print preview.
CO5	Use formulas like Vlookup, Hlookup, count,sum.
CO6	Create Charts and Graphs.
CO7	Use Pivot Tables for Data Analysis.

BCOM SEMESTER VI

Programme	B.Com

Course Title	E-Commerce
Course Code	BCC607
Credits	5

Course Objective:

- To understand the concepts of E-business, E-management, E-purse, EDL, Digital certificates & payments Likes Debit, credit cards, E-cash etc

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	To introduce students to the concepts of E-Commerce.
CO2	To equip students to asses E-commerce requirements of a business and develop E-business plans.
CO3	To help students understand various E-commerce applications.
CO4	To help students in understanding how data is secured on the Network through security techniques like cryptography & firewalls.
CO5	To acquire knowledge of online payment system.

BCOM SEMESTER VI

Programme	B.Com
Course Title	Management Information System
Course Code	BCC608
Credits	5

Course Objective:

- To understand the what is MIS, Data processing Decision support system and end user computing.
- Understand the structure of MIS.
- To learn framework of Information System.
- To learn the Data ware housing.

Course Outcomes:

On Successful completion of this course learners will be able to:

CO1	Explain Need, Purpose and Objectives of MIS.
CO2	Explain information as strategic resources.
CO3	Explain DBMS and RDBMS.
CO4	Define Information security control and quality Assurance.
CO5	Elaborate Data warehousing and Data Mining.

INDIRA PRIYADARSHINI GOVERNMENT DEGREE COLLEGE FOR WOMEN, NAMPALLY, HYDERABAD, 500001

NAAC REACCREDITED WITH B GRADE

DEPARTMENT OF MICROBIOLOGY

PROGRAM SPECIFIC OUTCOMES –MBC

The programme provides opportunities for students to develop and demonstrate knowledge, understand the core concepts and skills in the areas Microbiology, Botany and Chemistry, enabling them to capitalize on a range of career opportunities.

Knowledge-Based

Upon graduation, students will be-

- Understand the characteristics of different microorganisms and comprehend their physiology and metabolism.
- Get equipped with basic methods and techniques used in microbiology and learn their indispensable role in various fields of microbiology.
- Conceptualise the aspects of immune system and immune responses and get familiarized with role of microorganisms in disease causation and their diagnosis
- Able to master a broad set of Biological and chemical knowledge concerning the fundamentals in these areas.
- Able to explicate the ecological interconnectedness of life on earth by tracing energy and nutrient flows through the environment.
- Able to relate the physical chemical features of the environment to the structure of populations, communities and ecosystems.
- Explain the dynamics of commensal and pathological relationships that occur between microbes and humans and their treatment with drugs.

Practical Skills

- Carry out practical work with minimal risk (both to self and to others).
- Undertake laboratory tasks and techniques.
- Undertake fieldwork tasks and techniques.
- Design and undertake a programme of scientific investigation.
- Analyze data using appropriate statistical methods, including by computer.
- Understand the concept of Isomerism, basic characteristics of aliphatic & aromatic compounds, carbohydrates, heterocyclic compounds. Know about the mode of action of drugs and fundamentals of green and polymer chemistry
- Understand the basic concepts of Thermodynamics, electrochemistry, chemical kinetics, atomic structure, coordination compounds, bioinorganic chemistry, metal complexes, spectroscopy and separation techniques
- Learn to perform the qualitative and quantitative analysis for identifications and estimations of various chemical compounds

Career prospects

Can opt for a diversity of careers in academia, in research institutions, in school teaching, in conservation and in biologically related commercial sector activities.

PROGRAM SPECIFIC OUTCOMES- MZC

The B.Sc. Microbiology, Zoology and Chemistry programme is designed to help the students to:

- Understand the characteristics of different microorganisms and comprehend their physiology and metabolism.
- Get equipped with basic methods and techniques used in microbiology and learn their indispensable role in various fields of microbiology.
- Conceptualise the aspects of immune system and immune responses and get familiarized with role of microorganisms in disease causation and their diagnosis
- Acquire basic knowledge of various branches of Zoology, Microbiology and General Chemistry meant both for a graduate terminal course and for higher studies.
- Inculcate interest in and love of nature with its myriad living creatures and analyze the relationship among animals, Microbes and chemistry of the living forms.
- Understand the unity of life with the rich diversity of organisms and their ecological and evolutionary significance.
- Acquire basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation and identify various potential risk factors to health of humans.
- Acquire basic knowledge and skills in certain applied branches to enable them for self-employment in Aquaculture, Apiculture, Agriculture, pharmacology and Medical laboratory techniques.
- Relate to, and interact effectively with, individuals and groups, including working effectively both as a team member and leaders at State, National and International level through linkages and networking.
- Apply a range of skills and techniques, using a variety of thought processes, to develop ideas in creative way for the betterment of society.
- Use tools of information technology for all activities related to Zoology, Microbiology and Chemistry.
- Understand the concept of Isomerism, basic characteristics of aliphatic & aromatic compounds, carbohydrates, heterocyclic compounds. Know about

the mode of action of drugs and fundamentals of green and polymer chemistry

- Understand the basic concepts of Thermodynamics, electrochemistry, chemical kinetics, atomic structure, coordination compounds, bioinorganic chemistry, metal complexes, spectroscopy and separation techniques
- Learn to perform the qualitative and quantitative analysis for identifications and estimations of various chemical compounds

PROGRAM SPECIFIC OUTCOMES- MBCC

The programme aims to:

- Instill the knowledge of the structure and functions of various bimolecular and apply the knowledge to understand the molecular mechanisms and metabolic pathways that occur in the living organisms.
- Imparts knowledge about Role of enzymes, Replication mechanism, Molecular aspects of cells, Tissues, Organs, Organisms.
- Develop the analytical approach towards solving biochemical calculations and learn to perform the experiments independently.
- Provide awareness on the various new approaches in Biochemistry and at the end of the course the students would be able to present scientific papers and carry out the projects.
- Create awareness on the structure and physiology of the microorganisms and how microbes play a vital role in the pathology, and can be used as model systems in the study of various molecular aspects.
- Understand the most characteristic features of microorganisms; bacteria, archaea, fungi, microalgae, protozoa and virus.
- Get equipped with the basic methods and techniques used in microbiology
- Comprehend the metabolism reproduction and propagation of microorganisms.
- Learn their indispensable role in environmental, Industrial, Agricultural, food, Pharmaceutical and medical fields.

- Understand the concept of structural and stereoisomerism and basic concepts of all aliphatic homologous series, carbohydrates, heterocyclic compounds, mode of action of drugs, green chemistry and polymer chemistry
- Understand the basic concepts in Thermodynamics, electrochemistry, chemical kinetics, atomic structure, coordination compounds, bioinorganic chemistry, metal complexes, spectroscopy and separation techniques
- Perform the qualitative and quantitative analysis for identifications and estimations of various chemical compounds.

PROGRAM SPECIFIC OUTCOMES –MCCA

- Understand the nature and basic concepts of Prokaryotes & Eukaryotes, Microscopy, branches of Microbiology, Sterilization techniques, Biomolecules, Biochemical techniques, pure culture techniques and Preservation methods.
- Understand the concept of microbial physiology, microbial genetics, microbial gene expression and applications of rDNA technology.
- Understand the concept of plant diseases and biocontrol,agricultural aspects of microbiology ,environmental microbiology, environmental pollution and Bioremediation, Food and Industrial microbiology- production and application aspect.
- Understand nature of Antigens, Antibodies, components of immune systems, antigen antibody reactions, understand the significance of normal flora, mode of action of antibiotics, awareness on water borne infections ,STD, Parasitology and mycology.
- Understand the programming concepts and methodology & the functionality of
  hardware and software aspects of computer systems.
- Provide effective and efficient real time solutions by acquired knowledge in various domains such as C, C++, JAVA, etc.
- Provide technical training through a range of educational activities to develop a
  range of transferable skills applicable to employment.
- Emerge as Program Developer.
- Function as Data Base Administrator.
- Acquire knowledge on web programming to design web applications.
- Acquire knowledge on word processing, spread sheets and presentation slides.

I

COURSE OUTCOMES OF MATHEMATICS

I-YEAR SEMESTER- I, PAPER-I

PAPER- Code	Course Title	Credits
BS104	Differential calculus	4T+2P=6

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

Explain the relationship between the derivative of a function as a function and the notion of the derivative as the slope of the tangent line to a function at a point. Compare and contrast the ideas of continuity and differentiability. To inculcate to solve algebraic equations and inequalities involving the sequence root and modulus function To able to calculate limits in indeterminate forms by a repeated use of L' Hospital rule. To know the claim rule and use it to find derivatives of composite functions. To find maxima and minima, critical points and inflection points of functions and to determine the concavity of curves. To able to evaluate integrals of rational functions by partial fractions. To find radius of curvature,polar and pedal equations,To differentiate composite function,implicit function,they can use lagrange's method of undetermined multipliers.Asymptotes,method of finding asymptotes of algebraic equation,asymptotes by expansion,asymptotes of polar curves,Envelope.

****

I-YEAR SEMESTER-II, PAPER-II

PAPER- Code	Course Title	Credits
BS204	Differential Equations	4T+2P=6

On successful completion of the course, Students will be able to:

The main aim of the course is to introduce the students to the technique of solving various problems of engineering and science Distinguish between linear, nonlinear, partial and ordinary differential equations. Solve differential equations of first order and first degree,Differential equations of first order but not of first degree.Solve Higher order homogeneous linear differential equations, Higher order non homogeneous linear differential equations. Method of

undetermined coefficients,method of variation of parameters, Linear differential equations with non- constant coefficients , the Cauchy-Euler equations. Partial differential equations. First order linear and non-linear partial differential equations.

II-YEAR SEMESTER-III, PAPER-III

PAPER- Code	Course Title	Credits
BS304	Real Analysis	4T+2P=6

After completing the course students are expected to be able to:

Describe the basic difference between the rational and real numbers. Give the definition of concepts related to sequences and their limits , monotone sequence and subsequences, limit inferior,limit superior and Cauchy sequence, infinite series-1,2,sequences of functions, series of functions, power series,behavior of power series at the end points of the interval of convergence, The Riemann integral, fundamental theorem of integral calculus.

****

II-YEAR SEMESTER-IV, PAPER-IV

PAPER- Code	Course Title	Credits
BS404	Algebra	4T+2P=6

After completing the course students are expected to be able to:

- Assess properties implied by the definitions of groups and rings,
- Use various canonical types of groups (including cyclic groups and groups of permutations) and canonical types of rings (including polynomial rings and modular rings),
- Analyse and demonstrate examples of subgroups, normal subgroups and quotient groups,
- Analyse and demonstrate examples of ideals and quotient rings,

- Use the concepts of isomorphism and homomorphism for groups and rings.

****

III-YEAR SEMESTER-V, PAPER-V

PAPER- Code	Course Title	Credits
BS504	Linear Algebra	3T+2P=5

After completing the course students are expected to be able to:

- Analyse finite and infinite dimensional vector spaces and subspaces over a field and their properties, including the basis structure of vector spaces,
- Use the definition and properties of linear transformations and matrices of linear transformations and change of basis, including kernel, range and isomorphism,
- Compute with the characteristic polynomial, eigenvectors, eigenvalues and Eigen spaces, as well as the geometric and the algebraic multiplicities of an eigenvalue and apply the basic diagonalization result,
- Compute inner products and determine orthogonality on vector spaces, including Gram-Schmidt orthogonalization, and
- Identify self-ad joint transformations and apply the spectral theorem and orthogonal decomposition of inner product spaces
- Linear Algebra emphasizes the concept of vector spaces and linear transformations which are essential in simplifying various scientific problems.
- It aims at inculcating problem solving skills within students to enable them compute large linear systems.
- The practical applications of “Linear Algebra” are in demography, archaeology, electrical engineering, fractal geometry and traffic analysis.

****

III-YEAR SEMESTER-V,PAPER-VI

PAPER- Code	Course Title	Credits
BS506	Solid Geometry	3T+2P=5

On successful completion of the course, Students will be able to:

- Understanding the concept of distance between two points.
- Understanding the concept on slope.
- Understanding the change of origin and change of scale.
- Learn various forms of straight lines.
- Learn various forms of spheres
- Learn about various conic sections.
- It is used in Mechanics and Astronomy.

III-YEAR SEMESTER-V, PAPER-VII

PAPER- Code	Course Title	Credits
BS604	Numerical Analysis	3T+2P=5

On successful completion of the course, Students will be able to:

Solve an algebraic or transcendental equation using an appropriate numerical method Approximate a function using an appropriate numerical method. 3.Solve a differential equation using an approximate numerical method Evaluate a derivative at a value using an appropriate numerical method Solve a linear system of equations using an appropriate numerical method Course Title HPW Numerical Analysis 3T+3P Perform an error analysis for a given numerical method Prove results for numerical root finding methods Calculate a definite integral using an appropriate numerical method Code a numerical method in a modern computer language.

****

III-YEAR SEMESTER-V, PAPER-VIII

PAPER- Code	Course Title	Credits

BS606	**Vector Calculus**	**3T+2P=5**

After completing the course students are expected to be able to:

Vector calculus motivates the study of vector differentiation and integration in two and three dimensional spaces. It is widely accepted as a prerequisite in various fields of science and engineering. It offers important tools for understanding functions (both real & complex) non-Euclidean geometry and topology. These tools are employed successfully in different branches of engineering and physics (such as electromagnetic fields, fluid flow and gravitational fields).

****

INDIRA PRIYADARSHINI GOVERNMENT DEGREE COLLEGE FOR WOMEN, NAMPALLY, HYDERABAD, 500001

NAAC REACCREDITED WITH B GRADE

DEPARTMENT OF MICROBIOLOGY

B.Sc (MICROBIOLOGY)

SEMESTER	CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS
I	BS104	General Microbiology-I	DSC-1A	4+2	5
II	BS204	General Microbiology -II	DSC-1B	4+2	5
III	BS301 BS304	Haematology Microbial Physiology and Enzymology	SEC-1 DSC-1C	2 4+2	2 5
IV	BS401 BS404	Food adulteration Microbial Genetics and Molecular Biology	SEC-2 DSC-1D	2 4+2	2 5
V	BS501 BS502 BS503	Mushroom Cultivation Microbiology And Human Health Applied Microbiology	SEC-3 GE-1 DSC-1E	2 2 3+2	2 2 4
	BS506	Immunology	DSE-1E	3+2	4
VI	BS601 BS602 BS603	Hospital Waste management Contagious diseases and immunization Medical Microbiology	SEC-4 GE-2 DSC-1F	2 2 3+2	2 2 4
	BS606	A-Food Microbiology	DSE-1F	3+2	4

SEMESTER -1 : GENERAL MICROBIOLOGY

Upon successful completion of the course, students are expected to be able to:

- Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering.
- Have a thorough concept of microscopy, methods of staining and measurement.
- Gain knowledge about how microorganisms are ubiquitous in nature with a concept on classification and general characteristics on microorganisms.
- Understand general characters of eukaryotes and viruses.

SEMESTER II : GENERAL MICROBIOLOGY- II

Upon finishing the course in general microbiology students are able to :

- Perform and follow sterilization techniques and display a habit of good lab practices.
- Develop and have thorough knowledge of developing pure cultures and methods of preservation techniques.
- Understand the fundamental biochemical principles, such as the structure/function of biomolecules.
- Gain knowledge on current biochemical and molecular technique and carry out experiments.

SEMESTER –III: MICROBIAL PHYSIOLOGY AND ENZYMOLOGY

By the conclusion of this course, the students should be able to:

- Identify the various physiological groups of bacteria with their special features.
- Detail the macromolecules required for cell synthesis and growth as well as explain the various transport systems involved in the uptake of nutrients by bacteria.
- Devise and prepare media for isolation and growth of microorganisms, describe the different stages, methods and measurement of microbial growth and how environmental factors (pH, temperature, salt concentration) effect microbial growth, metabolism, and physiology.
- Explain the structure and function of enzymes, how enzymes are able to increase speed of an biochemical reaction, mechanisms of regulation of enzymatic action, importance of enzymes in regulation of metabolism.
- Explain the principles of the energy-yielding and -consuming reactions, the various catabolic pathways(including fermentations and photosynthesis), and the mechanisms of energy conservation in microbial metabolism.

SEMESTER –IV : MICROBIAL GENETICS AND MOLECULAR BIOLOGY

By the conclusion of this course, the students should be able to:

- Analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons.
- Analyze the molecular mechanisms behind DNA damage and repair, classify mutations and discuss the various ways in which bacteria acquire new genetic information. (transduction, transformation, and conjugation)
- Conceptualise gene and their types and explain the processes and regulatory mechanisms governing the synthesis of nucleic acid and protein.
- Explain the basic principles of genetic engineering (enzymes and vectors) and the applications of genetic engineering in various fields.

SEMESTER V: IMMUNOLOGY

By the conclusion of this course, the students should be able to:

- Demonstrate a comprehensive and practical understanding of basic immunological principles involved in research and clinical/applied science.
- Differentiate between humoral and cell mediated immunity and Learn about the different cells in immune system and their role in immunity.
- Understand the concept of antigens, antibodies and their structures in brief. Understand about the types of hypersensitivity and autoimmunity.
- Discuss current immunology news and issues.

SEMESTER V : APPLIED MICROBIOLOGY

On completion of this course, students should be able to:

- Understand the role of microorganisms as plant growth promoting bacteria and understanding the characteristics of soil.
- To understand the concepts and approaches to manage plant pathogens and diseases in crops and natural plant communities by measures that have minimal impact on the environment.
- To understand the concept of nitrogen fixation and role of microorganisms in the geochemical cycles and host- microbe interactions .
- Understand the role of microorganisms as agents of environmental change & recognize microorganisms as indicators & to understand microbial processes aimed to solve environmental problems.

SEMESTER –VI : MEDICAL MICROBIOLOGY

On completion of this course, students should be able to:

- Understand the importance and the role of normal flora, diagnosis and treatment.
- Description , classification, structure, and pathogenesis of bacteria that infect humans.
- To understand the importance of pathogenic bacteria in human disease with respect to infections of the respiratory tract, gastrointestinal tract, urinary tract, skin and soft tissue and explain the methods of microorganisms control, e.g. chemotherapy & vaccines.
- Solve problems in the context of this understanding. Recall the relationship of this infection to symptoms, relapse and the accompanying pathology.

SEMESTER VI: FOOD MICROBIOLOGY

On completion of this course, students should be able to:

- Understand the role microorganisms in food spoilage & to use predictive microbial growth programs with various food case studies to examine growth of foodborne pathogens and spoilage microbes.
- Understand theoretical background of functional micro-organisms (lactic acid bacteria, yeasts and molds), their behavior as fermentation starters, process engineering aspects of the formation of biomass and products, and of modern biotechnology in food fermentation.
- Understand the concept of food preservation and food poisoning.
- Understand microbial processes aimed to solve environmental problems.

PROGRAM SPECIFIC OUTCOMES (PSOs)

B.Sc. Program core outcomes

PSO1: To blend theoretical knowledge with practical skills in sciences to attain holisic approach and eventually occupy good positions in teaching field, industries, diagnostic centers etc.

PSO2: To provide the students with knowledge, tools of analysis, and skills with which to understand and participate and to achieve success in their professional careers.

PSO3: Analyse biological aspects and their significance to understand their importance and applications in day to day life.

PSO4: Work competently and productively in groups, exercising team kills and qualify for employment in a wider range of occupations.

PHYSICS DEPARTMENT

Physics

Common for B.Sc. (MPC & MPCS)

Course Objectives:

The course should enable the students to

1. Understand basic principles of Mechanics, Optics, Thermal Physics, Waves & Oscillations, Modern Physics, Electromagnetism, Solid state Physics and Electronics
2. Gain the knowledge of free electron theory of metals and mobility mechanism of semi conductor materials which leads to the application in Electronics and concepts of shell model, liquid drop model for determining the stability of nucleus of an atom, structure of an atom and its spectroscopy.
3. Learn and gain knowledge about various types of Electronic devices, Abberations in Spherical Lens, Interference, diffraction, Polarisation and Optical fibre mechanism for communication system.
4. Know about various types of lasers and significance of super conductivity in Industrial, Medical fields etc.
5. Learn about Material properties like Magnets, digital Electronics and Network theorems, Harmonic oscillations in strings, bars and damped vibrations.

Course Outcomes

The student will able to

1. Analyse the Quantum theory of radiations from that they know the concept of Photon, Photoelectric effect, the wave particle duality and about energy levels and uncertainty principle and that principle applicable to simple harmonic oscillator, Hydrogen atom energy levels from Quantum mechanics and classical mechanics.
2. To evaluate the mobility of charge carrier concentration of a given semi conductor materials, rocket motion equation, collissions in different dimensions, special theory of relativity and vector analysis
3. Justify how the optical fibres are classified according to their refractive indices, materials and modes and also the laser types, superconductivity application in various fields
4. To learn about working of Transistors, feedback oscillators and coupled oscillators
5. Gain knowledge and applications of Physics in Mechanics, Optics, thermodynamics, electromagnetism, electronics and modern physics.

Physics Lab

Course Objectives

1. To provide an experimental foundation for the theoretical concepts introduced in the lectures
2. To teach how to make careful experimental observations and how to think about draw conclusions from such data
3. To help students understand the role of direct observations in physics and to distinguish between interferences based on theory and the outcomes of experiments.
4. To introduce the concepts and techniques which have a wide application in experimental science but have not been introduced in the standard courses
5. To teach how to write a technical report which communicates scientific information in a clear and concise manner;

Learning Outcomes

By the end of the course students will be able

1. To make careful experimental observations and draw conclusions from such data
2. To distinguish between inferences based on theory and the outcomes of experiments
3. To write a technical report which communicates scientific information in a clear and concise manner.

Programme Outcomes

Bachelor of Science (B.Sc)

1. Students will have a broad foundation in the three major subjects of their choice with scientific reasoning, problem solving and analytical skills.
2. The students are trained in a breadth and depth of experimental techniques using modern instrumentation which help them to take up higher education or jobs after the course.
3. They develop the ability to effectively communicate scientific information in written and oral formats.
4. They acquire the ability to work in teams and apply basic ethical principles.

COURSE OUTCOMES OF DEPARTMENT OF STATISTICS

I-YEAR, II-YEAR - Sem I,II,III & IV

I-YEAR

SEMESTER-I PAPER-I

Course Title	Course Type	HPW	Credits
DESCRIPTIVE STATISTICS AND PROBABILITY(THEORY + PRACTICAL)	DSC-2A	4(TH)+2(PR)	4+1

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

- Organize, manage and present data.
- Analyze statistical data graphically using frequency distributions and cummulative frequency distributions.
- Analyze statistical data using measures of central tendency, dispersion and location.

- Use the basic probability rules, including additive and multiplicative laws, using the terms, independent and mutually exclusive events.
- Translate real-world problems into probability models.
- Derive the probability density function of transformation of random variables.
- Calculate probabilities, and derive the marginal and conditional distributions of bivariate random variables.
- Analyze Statistical data using MS-Excel.

I -YEAR

SEMESTER-II PAPER-II

Course Title	Course Type	HPW	Credits
PROBABILITY DISTRIBUTIONS (THEORY + PRACTICAL)	DSC-2B	4(TH)+2(PR)	4+1

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

- Use discrete and continuous probability distributions, including requirements, mean and variance, and making decisions.
- Define binomial outcomes and compute probability of getting X successes in N trials.
- Identify the characteristics of different discrete and continuous distributions.
- Identify the type of statistical situation to which different distributions can be applied.
- Use Poisson, exponential distributions to solve statistical problems..
- Use the normal probability distribution including standard normal curve calculations of appropriate areas.
- Use different distributions to solve simple practical problems.
- Analyze Statistical data using MS-Excel.

II-YEAR

SEMESTER-III PAPER-III

Course Title	Course Type	HPW	Credits
STATISTICAL METHODS	DSC-2C	4(TH)+2(PR)	4+1

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

- Calculate and interpret the correlation between two variables.
- Calculate the simple linear regression equation for a set of data.
- Employee the principles of linear regression and correlation, including least square method, predicting a particular value of Y for a given value of X and significance of the correlation coefficient.
- Know the association between the attributes.
- Know the construction of point and interval estimators.
- Evaluate the properties of estimators.
- Demonstrate understanding of the theory of maximum likelihood estimation.
- Analyze Statistical data using MS-Excel.

Paper-IV

Semester-IV

Course Title	Course Type	Hpw	Credits
INFERENCE (THEORY + PRACTICAL)	DSC-2D	4(TH)+2(PR)	4+1

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

- Define null hypothesis, alternative hypothesis, level of significance, test statistic, p value, and statistical significance.

- Identify the four steps of hypothesis testing.
- Apply central limit theorem to describe inferences.
- Perform parameter testing techniques, including single and two sample tests for means, standard deviations and proportions.
- State and define the inference from small samples including differences between two population means, population variances.
- Analyze data including Chi-square test for goodness of fit and independence of attributes.
- Use in practice the parametric and non-parametric statistical methods.
- Use MS-Excel to generate output for the most common inference procedures.

III- YEAR
PAPER – III [ANNUAL]

Course Title	HPW
APPLIED STATISTICS	3(TH)+3(PR)

On successful completion of the course, students will be able to:

- Know the practical issues arising in sampling studies.
- Appropriately interpret results of analysis of variance tests.
- Design experiments, carry them out, and analyze the data they yield.
- Demonstrate understanding of the concepts of time series and its applications in different areas.
- Explain how supply and demand relationships between the price of a product and the quantity of the same product.
- Determine the equilibrium price and quantity from a table of prices and the related quantity supplied and quantity demanded.
- Acquire knowledge on vital statistics, Index numbers and calculate an indices from given data.
- Analyze statistical data using MS-Excel.

III- YEAR

PAPER – IV [ANNUAL]

Course Title	HPW
QUALITY, RELIABILITY AND OPERATIONS RESEARCH	3(TH)+3(PR)

On successful completion of the course, students will be able to:

- Understand the concepts of quality control, chance and assignable causes of variation, control charts for variables and attributes, producer's and consumer's risk - Acceptance sampling plans.
- Understand the setting of mean chart limits, range chart limits using mean and range charts.
- Know the various techniques of operations research.
- Translate a real – word problem, given in words, into a mathematical formulation.
- Analyze the results and propose recommendations to the decision making processes.
- Build and solve transformation models and assignment models.
- Implement practical cases in operations research by using TORA.
- Analyze statistical data using MS-Excel.

COURSE OUTCOMES (CO)

Course Code :-BS105 Program :- B.Sc.(B.Z.C.)
Semester – I Course title :-Zoology-I HPW :- 4+2
Credits – 5

CO1:To understand about classification and general characters of invertebrate phyla

CO2:To learn about protozoan structure and life history and also about pathogenic protozoans

CO3:To understand about poriferan characters and lifehistory

CO4 : To classify and learn general characters of cnidarians and their polymorphism

CO5 : To know about the helminthic parasites and their parasitic adaptations

CO6: To classify and learn general characters of Annelida, Arthropoda, Mollusca, Echinodermata and Hemichordata phyla

Course Code :-BS205 Program :- B.Sc.(B.Z.C.)
Semester –II
Course title :- Zoology-II HPW :- 4+2
Credits – 5

CO1:To learn about Ecosystem structure and functions , biogeochemical chemical cycles, energy flow in ecosystem ,food chains and food web,ecological pyramids.

CO2:To learn about animal associations population dynamics,community structure ,ecological succession ,ecological adaptations.

CO3:To know about environmental pollution,wildlife conservation,biodiversity

CO4:To know about zoogeographical regions,Wallace line,discontinuous distribution,continental drift.

CO5:To understand animal behaviour ,social behaviour and biological clocks.

CO6:To know practically the presence of dissolved oxygen, salinity ,PH of various water samples.

COURSE OUTCOMES (CO)

Course Code :-BS305 Program :- B.Sc(B.Z.C)
Semester – III
Course title :- Zoology-III HPW :- 4+2
Credits – 5

CO1:To learn about classification and general characters of vertebrates from fishes to mammals.

CO2:To know about sailent features of Urochordata,cephalochordate,cyclostomata.

CO3:To know about general characters of phylum chordata and characters of amphbia and their parental care

CO4:To learn about characters of reptilia and to identify non-poisonous and poisonous snakes, temporal fossae in reptilia.

CO5:To know about flight adaptations and migration in birds.

CO6:To learn about mammalian aquatic adaptations and their dentition and also developmental biology

Course Code :-BS405 Program :- B.Sc.(B.Z.C.)
Semester –IV

Course title :- Zoology -IV HPW :- 4+2
Credits – 5

CO1:To understand cell biology ,cell cycle and its regulation

CO2:To know about molecular biology and its importance

CO3:To learn about genetics and also various genetic disorders.

CO4:To learn theories of organic evolution and the evidences,forces of evolution

CO5:To know about isolation, speciation.

CO6:To understand the causes and role of extinction in evolution.

Department of English
Learning Outcomes

Name of the Text: English made easy

Course: English paper I, II

BA/B.COM/ BSC

At the end of the course, the student will be able

Co1 - To enhance language through learner centric methods Understand and appreciate the work of the great British and American writers

Co2 – Identify the root words and prefixes and suffixes and enrich their vocabulary

Co3- To familiarize with various aspects of Telangana.

Co4 – Develop reading, writing, and analytical and computer skills.

Co5 – Channelize energy through soft skills and value orientation.

Course – English paper III & IV

Name of the text: English in use

Co1 – Understand and appreciate the various genres like short fiction, poetry, drama, etc

Co2 – To carry out LSRW Skills.

Co3 – To develop their critical thinking skills

Co4 – To differentiate between American & British Vocabulary

Co5 – To focus on use of English rather than usage of English.

Co6 – To know the practical , emotional, intellectual and creative aspects of language.

COURSE OUTCOMES (CO)

Course Code :- Program :- B.A, B.Com, B.Sc. Semester – I Course title :- हिंदी-I HPW :-5 Credits – 5

CO1: हिंदी का महत्व जानना और भारतीय भाषाओँ में हिंदी के स्थान को समझना
CO2: विभिन्न रचनाकारों के जीवन और साहित्य से परिचित होना
CO3: हिंदी के मुख्य कहानीकारों की कहानियों को पढ़ना और और कहानी के विभिन्न तत्वों को समझना
CO4: हिंदी के व्याकरण के विभिन्न अंगों जैसे लिंग, वचन, काल, कारक, वाच्य आदि का सही प्रयोग
CO5: व्याकरण की दृष्टि से अशुद्ध वाक्यों को शुद्ध करना और उनका सही प्रयोग
CO6: कार्यालयीन हिंदी के अंतर्गत प्रशासनिक शब्दावली का अंग्रेजी या तेलुगु से हिंदी में और हिंदी से अंग्रेजी या तेलुगु में अनुवाद कर सकना.

Course Code :- Program :-B.A,B.Com, B.Sc. Semester –II
Course title :- हिंदी -II HPW :- 5
Credits – 5

CO1: हिंदी भाषा का शुद्ध प्रयोग कर पाना और शुद्ध वर्तनी, उच्चारण के द्वारा हिंदी में अभिव्यक्त कर पाना
CO2: हिंदी में निबंध, नाटक, व्यंग्य, कहानी आदि विधाओं में लिखी गयी रचनाओं को पढ़ना और रचनाकारों के जीवन परिचय जानना
CO3: पर्यावरण और हम पाठ द्वारा पर्यावरण के महत्व को जान कर अपना योगदान देने के लिए प्रेरित होना.
CO4: हिंदी भाषा का शुद्ध प्रयोग कर पाना और शुद्ध वर्तनी, उच्चारण के द्वारा हिंदी में अभिव्यक्त कर पाना
CO5: व्याकरण के अंतर्गत संधि के प्रकार समझना और संधि विच्छेद करना शब्दों के विलोम बोल और लिख पाना
CO6: पत्रों के प्रकार समझना और पत्र- लेखन के नियमों का पालन करते हुए सफल तथा सशक्त सम्प्रेषण एवं अभिव्यक्ति करना

COURSE OUTCOMES (CO)

Course Code :- Program :-B.A,B.Com, B.Sc Semester – III

Course title :- हिंदी-III HPW :- 5
Credits – 5

CO1: हिंदी साहित्य के भक्तिकाल की विभिन्न धाराओं के प्राचीन कवियों की कविताओं को समझना और उन कवियों से परिचित होना
CO2: आधुनिक काल के मुख्य आरंभिक कवियों की रचनाओं के भाव एवं कला पक्ष को समझना
CO3: हिंदी साहित्य के इतिहास में काल विभाजन को जानना
CO4: हिंदी साहित्य के आदिकाल तथा भक्तिकाल की पस्थितियों एवं विशेषताओं से परिचित होना तथा इन कालों के प्रमुख कवियों के जीवन और काव्य को समझना
CO5: हिंदी में विभिन्न विषयों पर निबंध लिखना
CO6: अंग्रेजी या तेलुगु से हिंदी में तथा हिंदी से अंग्रेजी या तेलुगु में वाक्यों का अनुवाद करना

Course Code :- Program :-B.A, B.Com, B.Sc
Semester –IV
Course title :-English -IV HPW :- 5
Credits – 5

CO1: हिंदी साहित्य के रीतिकालीन कवियों की कविताओं को समझना और उन कवियों से परिचित होना
CO2: आधुनिक काल के मुख्य कवियों की रचनाओं के भाव एवं कला पक्ष को समझना
CO3: हिंदी साहित्य के रीतिकाल एवं आधुनिक काल की पस्थितियों एवं विशेषताओं से परिचित होना तथा इन कालों के प्रमुख कवियों के जीवन और काव्य को समझना
CO4: हिंदी में विभिन्न विषयों पर निबंध लिखना और निबंध के द्वारा अपने विचारों को सुव्यवस्थित ढंग से व्यक्त करना
CO5: हिंदी में लिखे गए किसी भी गद्यांश को पढ़ना, समझना एवं उससे सम्बंधित किसी भी प्रश्न का उत्तर दे सकना
CO6: हिंदी में उच्च शिक्षा की ओर प्रेरित होना और हिंदी में कैरिएर की संभावनाओं के बारे में जानना

తెలుగు విభాగం ప్రోగ్రాం ఫలితాంశాలు :

డిగ్రీ విద్యార్థుల సామర్థ్యానికి గాను ద్వితీయ భాష తెలుగును ఏర్పరచిన సందర్భంగా ప్రణాళికబద్ధంగా తయారు చేసిన బోధన ఫలితాంశాలు. తెలుగు భాష మనదేశం అధికారభాషగా గుర్తించిన భాషలలో ఒకటి. ఇది భారతదేశంలో మూడవ అతిపెద్ద మాట్లాడే భాష. తెలుగు మాట్లాడే ప్రజల మాతృభాష తీపి భాష. తమ స్వంత ఆలోచనలను, అభిప్రాయాలను, భావాలను, భావోద్వేగాలను స్వేచ్ఛగా మరియు సంతోషంగా పంచుకునేలా వారికి మంచి ఆదేశంతో విద్యార్థులకు సహాయం చేస్తుంది. డిగ్రీ స్థాయిలో తెలుగు భాషని ఎంచుకోవడం, మునుపటి తరానికి చెందిన విలువలు, ప్రమాణాల సంప్రదాయం మరియు సంస్కృతి గురించి చాలా మందికి తెలుసు. వారి అభ్యాస సమయంలో విద్యార్థులు మేధో సంపద, లోతైన మానవ అంత:దృష్టి మరియు ప్రముఖ మరియు అత్యుత్తమ కవుల సామాజిక ఆందోళనను గమనించారు. తెలుగు సాహిత్య రచన మరియు విమర్శకులు. వారి రచనలలో ఎక్కువ భాగం ప్రస్తుత తరానికి చెందిన యువకులు, ఇతరులతో సమన్వయంతో వ్యవహరించే విధానాలను మరియు సామెతలు వాటిని నేర్పించాయి. ఇది వారి వ్యక్తిగత వృత్తి జీవితంలో నైతిక విలువలతో క్రమబద్ధమైన మరియు విజయవంతమైన జీవన శైలిని ఎలా నిర్వహించాలో ఆచరణాత్మకంగా ఆలోచించే విద్యార్థుల దృష్టిని కూడా ఆకర్షిస్తుంది. ఈ ప్రక్రియలో, విద్యార్థులు సాంప్రదాయం గౌరవం, పెద్దలని గౌరవించడం, బాధ్యతలను పంచుకోవడం, కుటుంబాలకు మద్దతు ఇవ్వడం మరియు దేశభక్తిని పాటించడం వంటి కొన్ని లక్షణాలను ప్రోత్సహించాలన్న ఆసక్తితో విద్యార్థులకు ఇందులో పాఠ్యాంశాల తెలపడం జరిగింది. చివరగా తెలుగు విద్యార్థులు మా దగ్గరి నుంచి దశాబ్దాలుగా సమాజంలో మంచి, గొప్ప వ్యక్తిత్వాన్ని నేర్చుకుంటారు.

ఈ కోర్సు ప్రత్యేక మైన ఫలితాంశాలు :

విద్యార్థులను తరగతి గదిలో వివిధ కార్యక్రమాలు చేయించడం ద్వారా నాయకత్వ లక్షణాలను ప్రోత్సహించినట్లువుతుంది. ఆ తర్వాత విద్యార్థులకు చక్కటి ప్రవర్తన విధానం మరియు విశాలమైన మనస్సుతో బాధ్యత కలిగిన పౌరులుగా తయారవుతారు. సాహిత్యం

అధ్యయనం ద్వారా భారతీయ సంస్కృతి మరియు సంప్రదాయాలపై ప్రేమను పెంపొందించుకోవటానికి అవకాశం కలుగుతుంది.