

General English

Subject

Programme outcomes

The turn of the twenty first century has made the English Language skills a passport to the job market to all job seekers. Ability to communicate well in English has become a hallmark of good educational foundation and a prerequisite for all graduates. The students are expected to possess a measurable knowledge and a set of skills in using English language in personal and professional life. The present course English Praxis in three parts offers suitable context to teach, learn and practise target language skills. Each part of the course aims at certain specified skills which are taught through various text-based classroom activities and the English Language Laboratory activities. The syllabus of the course offers an open platform to the teacher to facilitate active participatory learning to the students. Hence the whole course is offered in three semesters. The first part of the course offers fundamentals of the English language in five units: Listening, Speaking, Grammar, Writing and Soft Skills. These introductory units are developed into full length courses in the subsequent semesters in addition to Reading Skills so as to prepare the learner into a fully equipped individual. In addition to the classroom interaction, the course also aims at language enhancement through various ICT based online and offline activities in the English Language Laboratory. Each Unit is reinforced with Laboratory activities. The innovative methods and creativity of the English faculty will enhance the learners' participation in teaching and learning.

Semester-I English Praxis Course-I : A Course in Communication and Soft Skills

Semester-II English Praxis Course -II : A Course in Reading & Writing Skills

Semester-III English Praxis Course -III: A Course in Conversation

English Praxis Course-1

(A Course in Communication and Soft Skills)

Grammar effectively in writing and speaking

Demonstrate the use of good vocabulary

Demonstrate an understanding of writing skills

Acquire ability to use soft skills professional and daily life

Currently used the tools of communication skills

Second -English Praxis -II

(A Course in Reading and Writing Skills) -

Use reading skills effectively

Comprehend different types of texts

Analyze what is being read

Build up a repository of active vocabulary

You good writing strategies

Write well for any purpose

Improve writing skills independently for future needs

Third- English Praxis-III

A Course in Conversational Skills

Speak fluently in English

Confidently in any social interaction

Sella professional discourse

Demonstrate critical thinking

Enhance conversation skills by observing the

professional interviews

DEPARTMENT OF SOCIOLOGY

DEGREE SYLLABUS -2020-2021

PROGRAMME & COURSE OUTCOMES

GROUP OFFERED	PROGRAMME OUTCOMES
<p>H.E.P. (History, Political science and Sociology)</p>	<p>Sociology seeks to understand all aspects of human social behaviour, including the behaviour of individuals as well as the social dynamics of small groups, large organizations, communities, institutions, and entire societies. Sociologists are typically motivated both by the desire to better understand the principles of social life and by the conviction that understanding these principles may aid in the formulation of enlightened and effective social policy. Sociology provides an intellectual background for students considering careers in the professions or business. An Honours Graduate student of Sociology should able to develop:</p> <ul style="list-style-type: none"> • Critical Thinking: The programme seeks to develop in students the sociological knowledge and skills that will enable them to think critically and imaginatively about society and social issues. □ Sociological Understanding: The ability to demonstrate sociological understandings of phenomena, for example, how individual biographies are shaped by social structures, social institutions, cultural practices, and multiple axes of difference and inequality. □ Written and Oral Communication: The ability to formulate effective and convincing written and oral arguments. • Better understanding of real life situation: The ability to apply sociological concepts and theories to the real world and ultimately their everyday lives. □ Analytical thinking: Field survey and preparation of dissertation paper is an inseparable part of Sociology Honours Programme. Students have to collect primary data for census as well as his/her research topic and analyse the data to draw conclusions. So, qualitative and quantitative analytical skills are enhanced • Observation power: a sensible observation power is necessary to identify the research problems in field study. So a perception about human society slowly grows up. □ Communication skills and Social interaction power: Students of Sociology stream have to work beyond the class room boundary at the time of field study activities. As a result good communication skill develops while interacting with local people.

		<ul style="list-style-type: none"> • Ethical and Social Responsibility: Students have to learn about institutions, folkways , mores, culture, social control ,social inequality, population composition, population policy, society and culture of India. All these help to in still among the students of Sociology a sense of ethical and social responsibility. <p>Professional and Career Opportunities: Students will have the opportunity to join professional careers in Sociology and allied fields. Sociology provides an intellectual background for students considering careers in business, social services, public policy .Government service, nongovernmental organizations, foundations, or academia. This programme lays foundation for further study in Sociology, Social work, Rural Development, Social Welfare and in other allied subjects.</p>
SEMESTER	NAME OF NTHE COURSE	COURSE OUTCOMES
FIRST	COURSE—I BASICS CONCEPTS OF SOCIOLOGY	<ol style="list-style-type: none"> 1.The Course will provide students with a solid grounding in the fundamentals of the sociology discipline 2.To understand the basic concepts in Sociology and their fundamental theoretical interrelations 3.Students will be able to define the relevance of the concepts like, Culture, Social Structure , Institutions
SECOND	COURSE—II SOCIOLOGY OF INDIAN SOCIETY	<ol style="list-style-type: none"> 1.Discuss the important concepts and perspectives of Indian Society 2.Explain the Indian Society though the lens of Sociology 3.Dicuss the significance of Social Institutions and practices
THIRD	SELECTED SOCIOLOGICAL THEORIES	<ol style="list-style-type: none"> 1.To learn about some of the important classical theories in Sociology 2.To know the theoretical foundations of Sociology 3.To development critical thinking analytical ability to interpret the social scenario
FOURTH	METHODS OF SOCIAL RESEARCH	<ol style="list-style-type: none"> 1.Formulate Research Questions 2.Practice Observation and conduct interviews 3.Carry out small Research Project 4.To present their researched views in the form of a research report
FIFTH	PAPER (5) A SOCIAL DEMOGRAPHY	<ol style="list-style-type: none"> 1.To enlighten the students about origin and development of Demography 2.Gains the knowledge about the demographic population data 3.Student will be able to understand Population theories causes and consequences of rapid population growth and Population Education
	PAPER(5) B SOCIETY AND EDUCATION	<ol style="list-style-type: none"> 1.The Students will be able to understand the importance of Education 2.To enhance knowledge on basic and different concepts of

		<p>education</p> <p>3.Acquire knowledge about education of weaker section</p> <p>4.To study the impact of Globalization on Education in India</p>
SIX	ELECTIVE PAPER(B) APPLICATIONS OF SOCIOLOGY	<p>Education for a New Century (Global Interdependence)Recognizes the global inter dependence of societies, economies, and environmental systems and the implications of his or her actions on the wider global environment, including the natural earth environment.</p> <p>Formulation and Testing of Sociological Hypothesis Students will understand the scientific method, identify sociological research questions, and use appropriate techniques to test them.</p> <p>The Leadership University (Reflection)Utilizes reflection to promote personal growth.</p> <p>Use of Appropriate Sociological Concepts in Problem Analysis Students will use appropriate sociological concepts and theories to understand social problems.</p> <p>Use of Resources for a Research Project Students will use appropriate resources and the discipline's annotation format for text citations and references in research projects.</p>
	ELCETIVE PAPER (B-1) RESEARCH METHODOLOGY	<ol style="list-style-type: none"> 1. Meaning Scope, types and significance of Social research 2. Importance of Research Design in Social Research and how to formulate it 3. How to collect, analyze data and how to wrote a field report Formulate Research Questions 4. Practice Observation and conduct interviews 5. Carry out small Research Project 6. To present their researched views in the form of a research report
	ELECTGIVE PAPER (B-2) GENDER STUDIES	<ol style="list-style-type: none"> 1. Exolain Gender in Sociological Analysis 2. Describe the relation between Social structure and Gender inequality 3. Understand theories and perspectives of feminism 4. Analyse the relation between Gender and Development 5. Explain the politics of Gender(Women's movements in pre-independence and post independence India. Current Women's movement ,displacement and eco feminism Women Reservations as Socio-Political Issue
	ELECTIVWE PAPER(B3)	<ol style="list-style-type: none"> 1. Preparation of Questionnaire Schedule on given topic 2. Data collection

Subject	Programme outcomes
<h1 style="text-align: center;">Special English</h1>	<p>English Literature courses in the Department of English expose students to a wide range of writing from British, American and Anglophone traditions. It helps students explore how writers use the creative resources of language-in fiction, poetry, nonfiction prose, and drama-to explore the entire range of human experience. Students are expected to strive, to be imaginative, rhetorically dexterous, and technically proficient and as a result, to gain a deeper insight into life. With the introduction of new syllabus under CBCS from this year, which promotes a new thematic frame work where classical Indian Bhasa literature share space with contemporary literary crosscurrents, UG syllabus at Surya Sen Mahavidyalaya will help students build skills of analytical and interpretive argument, and become careful and critical readers. Again, students' engagement with various strategies of drafting and revising, style of writing and analytical skills, diagnosing and developing scholarly methodologies, use of language as a means of creative expression, will make them effective thinkers and communicators — qualities which are crucial for choosing careers in our information-intensive society.</p> <p>Specific learning outcomes for English courses include the following:</p> <ol style="list-style-type: none"> 1. Reading: Students will gain awareness about the best literary traditions of the world. By learning how others live and handle their lives, one becomes connected with the world in a way we might not otherwise experience. They will discover that they are part of a huge conglomerate of human thought and emotion. All the great texts that a student of English honours will get chance to study will expand their range of experience. They can gain courage and strength by living vicariously through well-developed characters. Through reading students will have an awareness for varies perspectives. This will also expand their range of experience and in the process they will learn to be more empathetic toward the plights of others. 2. Literature, Nation and Tradition: The current syllabus in the UG level will provide students

an opportunity to know India's age old literary and cultural tradition through their exposure to Sanskrit texts and modern Indian vernacular literature in translation. How reading literature in English can be an effective means to address the complex issues of identity, nationalism, historical tradition in Indian context, is a new focus area of the present course.

3. Awareness about Culture and History:

Students gain an understanding of the relations between culture, history and texts. They learn to use texts as a gateway to various cultural traditions and interpret them in their historical contexts. How a literary text can appear as an ideal platform to locate dominant and marginalized voices of a society, is an important focus of the under-graduate literature programme.

4. Gaining of Critical Insight: An exposure to various social and cultural traditions and through the reading of representative texts from different periods help a student gain a critical insight about the reality as a whole. With the help of their Knowledge of various critical theory it is expected that they will be able to construct their own meaning about the reality and his historical situatedness.

5. Issue of Sexuality and Gender: Literature course teaches a student to believe that one's own sense of identity is not enough to persuade the rest of the world to agree. Human beings are no longer bound by such binary concepts as male-female or masculine-feminine. They will learn that sex is a biological concept based on biological characteristics, whereas gender deals with personal, societal and cultural perceptions of sexuality. Appropriation of literary texts as tools of cultural study will help students to challenge centuries of social tradition and scientific belief which promote such and other types of differentiations.

Cross Fertilization with allied Arts: Students of English Honours should also be able to articulate the relations among culture, history, and texts—for example, ideological and political aspects of representation, economic processes of textual production, dissemination and reception, and cross-fertilization with other arts: architecture, sculpture, music, film, painting, dance, and theatre.

6. Acquisition of Values: Acquisition of values is needed for individual development and social transformation. English literature course at UG level, like any other literary course, helps a student to gain subjective experience of the text's aesthetic value. This helps in developing

quality of thinking and imagination and is a step forward to emerge as a better human being. Through their judgment of the aesthetic value of a literary text students will learn to appreciate whatever is good and beautiful in life. Their healthy mind will thus be storehouse of healthy thoughts.

7. Writing skills and Process: Students will be able to recognize and comprehend different varieties of English language and develop a writing style of their own. English honours students should be aware also that textual analysis can be extended with profit to political, journalistic, commercial, technical, and web-based writing. It is expected that their exposure to the ideas of variety of writers and their cultural backgrounds, will have a bearing in their own literary styles. With the development of their writing skills and finesse of style there will be a possibility of them emerging as perspective writers, editors, content developers, teachers etc.

8. Means of Effective Communication: Study of literature is intertwined with the study of language . Learning various language patterns, sentence structures and dialogue forms can help one in real life in effectively communicating with others. English is the language of science, computers, diplomacy, and tourism. Knowing English increases students' chances of getting a good job in future

Semester - Name of the Course

First. An Introduction to English language and Literature -1- Course
Outcomes

1. know about the features of Old English, Middle English Renaissance Periods
2. Review the aspects of different literary genres, forms and terms
3. Identify the characteristics in Poetry , Drama and Literary Criticism
4. Interpret literature of these periods critically

Second- Course -II.

Know about the features of Elizabethan and Jacobean Periods

Review the aspects of romantic comedy and the evolution of prose as a genre

Distinguish the characteristics that evolved in Poetry , Drama ,Prose Literary Criticism

Assess literature of these periods critically

Third-Course -III An Introduction to Restoration and Augustan Literature (1660 - 1750)

Know about the features of Restoration and Augustan periods
Recognize the aspects of different literary genres, forms and terms
Identify the characteristics in literature that reflected the changing trends in society
Interpret literature of these periods critically

Relate the features of Romantic and Victorian periods
Observe the aspects of poetry on the contribution of women as literary artists

Analyse characteristics in Poetry, Drama Prose and Literary Criticism
Compare and evaluate literature of these critically

Four- An Introduction to Romantic and Victorian (1757-1901)

Relate the features of Romantic and Victorian periods
Observe the aspects of poetry and contribution of women as literary artists

Analyse characteristics in Poetry, Prose, Drama and Literary Criticism
Compare and evaluate literature of these periods critically

Four- Glimpses of World of literature

Understand the aspects of literature from all over the World
Analyse What makes the artists respond in different contexts
Interpret how different forms contribute to reflect life across the world

Analyse what makes artist respond in different contexts

SKR COLLEGE FOR WOMEN ,RAJAMAHENDRAVARAM

Department of Mathematics odd Sem 2020-2021

Programme & Course outcomes

		Programme outcomes
	B.Sc – M.P.C , M.P.Cs, M.S.Cs	<p>The Bachelor of Science in Mathematics prepares graduates to understand fundamental concepts in the discipline of MATHEMATICS.</p> <p>The academic program will promote and realize gains in student success.</p> <p>The academic program will promote and realize efficiency in the delivery and completion of the program</p>
SEM	Name of the course	Course outcomes
Sem- 1	DIFFERENTIAL EQUATION	<p>After successful completion of this course, the student will be able to;</p> <p>Solve linear differential equations</p> <p>Convert non exact homogeneous equations to exact differential equations by using integrating factors</p> <p>Know the methods of finding solutions of differential equations of the first order but not of the first Degree.</p> <p>Solve higher-order linear differential equations, both homogeneous and non homogeneous, with constant coefficients.</p> <p>Understand the concept and apply appropriate methods for solving differential equations.</p>
Sem-3	ABSTRACT ALGEBRA	<p>After successful completion of this course, the student will be able to;</p> <p>acquire the basic knowledge and structure of groups, subgroups and cyclic groups.</p> <p>get the significance of the notation of a normal subgroups.</p> <p>get the behavior of permutations and operations on them.</p> <p>study the homomorphisms and isomorphisms with applications.</p> <p>Understand the ring theory concepts with</p>

		the help of knowledge in group theory and to prove theorems.
SEM-5B	LINEAR ALGEBRA	<p>After successful completion of this course, the student will be able to;</p> <p>understand the concepts of vector spaces, subspaces, basis, dimension and their properties.</p> <p>understand the concepts of linear transformations and their properties</p> <p>apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods</p> <p>Learn the properties of inner product spaces and determine orthogonality in inner product spaces</p>
Sem-5A	RING THEORY AND VECTOR CALCULUS	<p>After successful completion of this course, the student will be able to</p> <p>get clear idea about the Ring theory, sub rings, integral domain, ideals , commutative ring, gradient of a vector, curl of a vector, divergent of a vector, greens theorem., gauss theorem, stokes theorem</p>

SKR GDC (W), RAJAMAHENDRAVARAM		
Department of Mathematics Even Sem 2021-2022		
Programme & Course outcomes		
		Programme outcomes
	B.Sc – M.P.C , M.P.Cs, M.S.Cs	<p>The Bachelor of Science in Mathematics prepares graduates to understand fundamental concepts in the discipline of MATHEMATICS.</p> <p>The academic program will promote and realize gains in student success.</p> <p>The academic program will promote and realize efficiency in the delivery and completion of the program</p>
SEM	Name of the course	Course outcomes
Sem-2 (course 2)	THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY	<p>get the knowledge of planes.</p> <p>basic idea of lines, sphere and cones.</p> <p>understand the properties of planes, lines, spheres and cones.</p> <p>express the problems geometrically and then to get the solution.</p>
Sem-4 (course 4)	REAL ANALYSIS	<p>After successful completion of this course, the student will be able to get clear idea about the real numbers and real valued functions.</p> <p>obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/series.</p> <p>Test the continuity and differentiability and Riemann integration of a function.</p> <p>Know the geometrical interpretation of mean value theorems.</p>

SEM-4 (course 5)	LINEAR ALGEBRA	<p>After successful completion of this course, the student will be able to;</p> <ul style="list-style-type: none"> understand the concepts of vector spaces, subspaces, basis, dimension and their properties. understand the concepts of linear transformations and their properties apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods Learn the properties of inner product spaces and determine orthogonality in inner product spaces
Sem-6(Elective)	NUMERICAL ANALYSIS	<p>After successful completion of this course, the student will be able to</p> <ul style="list-style-type: none"> get clear idea about the Error in numerical computations, Algebraic and transcendental equations, forward and backward difference table, Newton Forward and Backward interpolation formulas, gauss forward and backward interpolation formula, Strilling – formula, Legranges , Newton divided difference formula in Interpolation

SKR COLLEGE FOR WOMEN, RAJAMAHENDRAVARAM

Department of Botany 2020-2021

Programme and Course outcomes

		PROGRAMME OBJECTIVES AND OUTCOMES
	BSC-CBZ	<p>1.Objectives:</p> <ul style="list-style-type: none">• To provide a comprehensive knowledge on various aspects related to microbe and plants.• To deliver knowledge on latest development in the field of plant sciences with a practical approach• To produce a student who think independently, critically and discuss various aspect of plant life.• To enable the graduate to prepare and pass through national and international examination related to botany.• To empower the student to become an employee or an entrepreneur in the field of botany/Biology and to serve the nation. <p>2.Outcomes:</p> <ul style="list-style-type: none">• Understand the basic concepts of botany in relation to its allied courses.• Perceive the significance of microbes and plants for human welfare, and structural and functional aspects of plants.• Demonstrate simple experiment related to plant sciences, analyze data, and interpret them with theoretical knowledge.• Work in teams with enhanced interpersonal skills.• Develop the critical thinking with scientific temper.• Effectively communicate scientific

		ideas both orally and writing.
SEM	Name of the course	Course out comes
Sem-1	Fundamentals of microbes and Non-vascular plants	<p>On successful completion of this practical course, student shall be able to:</p> <ul style="list-style-type: none"> • Demonstrate the techniques of use of lab equipment, preparing slides and identify the material and draw diagrams exactly as it appears. • Observe and identify microbes and lower groups of plants on their own. • Demonstrate the techniques of inoculation, preparation of media etc. • Identify the material in the permanent slides etc.
Sem-2	Basics of vascular plants and phytogeography	<p>On successful completion of this course students shall be able to:</p> <ul style="list-style-type: none"> • Demonstrate the techniques of section cutting, preparing slides, identifying of the material and drawing exact figures. • Compare and contrast the morphological, anatomical and reproductive features of vascular plants. • Identify the local angiosperms of the families prescribed to their genus and species level and prepare herbarium. • Exhibit skills of preparing slides, identifying the given twigs in the lab and drawing figures of plant twigs, flowers and floral diagrams as they are. • Prepare and preserve specimens of local wild plants using herbarium technique.
Sem-3	Anatomy and embryology of angiosperms, plant ecology and biodiversity	<p>On successful completion of this course students shall be able to:</p> <ul style="list-style-type: none"> • Get familiarized with techniques of section making, staining and microscopic study of vegetative, anatomical and reproductive structure

		<p>of plants.</p> <ul style="list-style-type: none"> • Observe externally and under microscope, identify and draw exact diagrams of the material in the lab. • Demonstrate application of methods in plant ecology and conservation of biodiversity and qualitative and quantitative aspects related to population and communities of plants.
Sem-4	Plant physiology and metabolism	<p>On successful completion of this course students shall be able to:</p> <ul style="list-style-type: none"> • Conduct lab and field experiments pertaining to plant physiology, that is, biophysical and biochemical processes using related glassware, equipment, chemicals and plant material. • Estimate the quantities and qualitative expressions using experimental results and calculations. • Demonstrate the factors responsible for growth and development in plants.
Sem-5	Cell Biology, Genetics and Plant Breeding	<p>On successful completion of this course students shall be able to:</p> <ul style="list-style-type: none"> • Show the understanding of techniques of demonstrating Mitosis and meiosis in the laboratory and identify different stages of cell division. • Identify and explain with diagram the cellular parts of cell from a model or picture and prepare models. • Solve the problems related to crosses and gene interaction. • Demonstrate plant breeding techniques such as emasculation and bagging.
Sem-6	Nursery, Gardening and Floriculture (Elective)	<p>Ability to use a variety of garden tools and implements, proficiency in layering and grafting techniques (cleft grafting and bud grafting), landscape drawings using</p>

		computers, raising of healthy nurseries of flowering plants, managing vase life of cut flowers etc.
Cluster(A1)	Plant diversity and human welfare	Identification of exotic plant species, identification of forest trees based on the characteristics of bark, flowers and fruits, understanding the preservation methods of fresh and dry fruits, understanding the methods of safe disposal of biodegradable and non- biodegradable wastes.
Cluster(A2)	Ethnobotany and medicinal botany	Identification of various plant parts used as medicines by ethnic groups, understanding the difference between ancient wisdom and modern system of medicine, traditional medicine at the rescue of curing drug resistant maladies like malaria and viral diseases, understanding the role of spices in Indian kitchens, their therapeutic role.
Cluster(A3)	Pharmacognosy and phytochemistry	Identification of various plant parts used as medicines, extraction of active principles from, isolation by chromatographic techniques, learning callus culture techniques for secondary metabolite enrichment and understanding ethno pharmacological principles.

SEMISTER	NAME OF THE COURSE	COURSE OUTCOMES
		<p style="text-align: center;">Program outcomes</p> <ol style="list-style-type: none"> 1) Knowledge of animals of different phyla and their relationship with the environment. 2) Knowledge of the evolution of animals. 3) Environmental conservation & its importance, protection of endangered species. 4) Knowledge of ago – based industries like sericulture, pisciculture etc. 5) Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms. 6) Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms. 7) Understands the complex evolutionary processes and behaviour of animals. 8) Understands about various concepts of genetics and its importance in human health. 9) Apply the knowledge and understanding of Zoology to one's own life and work.
SEM 1	Animal Diversity – Biology of Non – chordates	<ul style="list-style-type: none"> • Describe general taxonomic rules on animal classification. • Classify Protozoa to Coelenterata with taxonomic keys. • Classify Phylum Platyhemninthes to Annelida phylum using examples from parasitic adaption and vermin composting. • Describe Phylum Arthropoda to Mollusca examples and importance of insects and Molluscs. • Describe Echinodermata to Hemichordate with suitable examples and larval stages in relation to the phylogeny.
SEM 2	Animal Diversity – Biology of chordates	<ul style="list-style-type: none"> • Describe general taxonomic rules on animal classification of chordates. • Classify Protochordata to Mammalian with taxonomic keys. • Understand Mammals with specific structural adaptations. • Understand the significance of dentition and evolutionary significance.

		<ul style="list-style-type: none"> • Understand the origin and evolutionary relationship of different phyla from Prochordata to mammalian.
SEM 3	CELL Biology, Genetics and Evolution	<ul style="list-style-type: none"> • To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure. • Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell. • To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals. • Acquiring in-depth knowledge on various of aspects of genetics involved in sex determination, human karyo typing and mutations of chromosomes resulting in various disorder. • Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society.
SEM 4	Embryology, Physiology and Ecology	<ul style="list-style-type: none"> • Developmental biology and embryology. To understand the gametogenesis and fertilization. • Formation and functions of foetal membrane in Chick embryo. • Elementary study of process of digestion. • Ultra-structure of muscle fibre, molecular and chemical basis of muscle contraction. • Hormonal control of reproduction in a mammal. • Important abiotic factors of ecosystem, nutrient cycles. • Community Interactions.
SEM 5	Animal Bio Technology Paper 5	<ul style="list-style-type: none"> • To understand the tools of recombinant DNA technology. • Cloning vectors. • Gene delivery. • To understand the hybridization techniques. • 'Animal cell technology. • Transgenic animals. • Manipulation of reproduction in animals. • Agriculture fisheries monoculture in fishes.
	Animal Husbandary Paper 6	<ul style="list-style-type: none"> • General Introduction to poultry forming. • Management of Chicks, growers and layers. • Managements of Broylers. • Nutrient requirements for different stages of layers and broilers.

		<ul style="list-style-type: none"> • Poultry diseases. • To understand the methods of hatching. • Cleaning and sanitation of dairy form. • Care and management of dairy animals.
SEM 6	Cellular Metabolism and Molecular Biology Paper 7 Elective	<ul style="list-style-type: none"> • Identifcation of an organ system with histological structure. • Demonstration of enzyme activity in vitro method. • Identification of various bio molecules of tissues by simple calorimetric methods and also quantitative methods. • Structure and function of plasma membrane and different cell organals of eukaryotic cell. • Understand the central dogma of molecular biology and flow of genetic information from DNA to protiens.
	Cluster –V111-B-1 Principals of aquaculture	<ul style="list-style-type: none"> • To understand the basics of aqua culture. • Major cultivable species for aquaculture. • Types of aquaculture. • Culture systems. • Culture practices.
	Cluster-V111-B-2 Aquaculture management	<ul style="list-style-type: none"> • To understand the breeding and hatchery management. • Water quality management. • Feed formulation and manufacturing. • Principals of Disease diagnosis and health management. • Economics and management.
	Cluster-V111-B-3 Post-harvest Technology	<ul style="list-style-type: none"> • Handling and Principals of fish preservation. • To understand the methods of fish preservation. • Processing and preservation of fish and fish by-products. • Seaweed Products. • Quality control of fish and fishery products. • Quality assurance, management and certification.

SKR GDC (W), RAJAMAHENDRAVARAM

Department of Chemistry 2020-2021

Programme & Course outcomes

		Programme outcomes
	BSC-MPC& CBZ	1. Understand the environment functions and how it is affected by human activities. 2. Acquire chemical knowledge to ensure sustainable use of the world's resources and ecosystems services. 3. Engage in simple and advanced analytical tools used to measure the different types of pollution. 4. Explain the energy crisis and different aspects of sustainability. 5. Gain the knowledge of chemistry through theory and practicals 6. identify chemical formula and solve numerical problems 7. understand good laboratory practices and safety 8. make aware and handle the sophisticated instruments or equipments
SEM	Name of the course	Course out comes
sem-1	Inorganic and Physical Chemistry	Understand the basic concepts of p-block elements <input checked="" type="checkbox"/> Explain the difference between solid, liquid and gases in terms of intermolecular interactions. <input checked="" type="checkbox"/> Apply the concepts of gas equations, pH and electrolytes while studying other chemistry courses.
sem-2	Organic & General Chemistry	Understand and explain the differential behavior of organic compounds based on fundamental concepts learnt. - Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved - Learn and identify many organic reaction mechanism including Free Radical Substitution, - Electrophonic Addition and Electrophonic Aromatic Substitution.

Sem-3	Organic chemistry & Spectroscopy	<p>Understand preparation, properties and reactions of haloalkanes, haloarenes and oxygen containing functional groups.</p> <p>☑ Use the synthetic chemistry learnt in this course to do functional group transformations.</p> <p>☑ To propose plausible mechanisms for any relevant reaction</p>
Sem-4	Inorganic, Organic and Physical Chemistry	<p>To learn about the laws of absorption of light energy by molecules and subsequent photochemical reactions.</p> <p>☑ To understand the concept of quantum efficiency and mechanisms of photochemical reactions</p>
SEM-5	Inorganic & Physical Chemistry	<p>Understand concepts of boundary conditions and quantization, probability distribution, most probable values, uncertainty and expectation values</p> <p>☑ Application Of Quantization To Spectroscopy.</p> <p>☑ Various types of spectra and their use in structure determination.</p>
Sem-6	INORGANIC & PHYSICAL CHEMISTRY	<p>Understand concepts Of boundary conditions and quantization, probability distribution, most probable values, uncertainty and expectation values</p> <p>2. Application of quantization to spectroscopy.</p> <p>3. Various types of spectra and the irusein structure determination</p>

cluster-A1	Polymer chemistry	<p>To understand the importance of the chemical approach to polymers and the subject provides an introduction to polymer science with respect to synthesis, polymerization kinetics and network formation/gelation of macromolecules formed by step-growth and chain-growth polymerization.</p> <ul style="list-style-type: none"> • To Study the, methods of measuring the molecular weight, polymerization kinetics and Copolymerization and polymer processing technologies. • To understand about radical and ionic polymerization and techniques of polymer analysis • To study mechanical properties and applications of polymers
cluster-A2	Instrumental methods of Chemistry	<p>To introduce the student to principles and theory of instrument analysis.</p> <ul style="list-style-type: none"> ☑ To teach the student the correct operation of chemical instruments. ☑ To introduce the student to the techniques of troubleshooting instruments in the chemical laboratory. ☑ To emphasize the safe use of chemical instrumentation. ☑ To teach the student to solve problems related to the use of chemical instruments.
cluster-A3	Analysis of Drugs, Foods, Dairy Products and Bio chemical analysis	<p>Students in this course will learn about microbes in food, spoilage of food and preservation techniques of food.</p> <p>Milk and milk products:and nutritional importance of milk, processing of milk.</p>