V. S. M. COLLEGE (A): RAMACHANDRAPURAM

B.SC CZAT-COURSE OUTCOMES

B.SC CHEMISTRY

INORGANIC AND ORGANIC CHEMISTRY - 1

- **CO1:** Basic concepts of this course will useful to understanding the concepts of higher classes.
- CO2: This theoretical knowledge will useful in various industries like pharmaceuticals, foods, fuels...... etc
- **CO3:** Acquire the basic knowledge of various types of reactions and effects which will be useful in theoretical inorganic and organic chemistry
- **CO4:** This course is very useful to generate new ideas in students.

SIMPLE SALT ANALYSIS LAB

- **CO1:** Get hands- on expertise in identifying the ions or radicals present in an unknown sample which will help in testing the sample of different kinds
- **CO2:** It is useful in tests and procedure to treat and diagnose patients
- **CO3:** Salt analysis is a chemical technique used to identify the ions present in a salt by analysing its physical and chemical properties
- **CO4:** Much of our daily life is dependent on chemical analysis. So, it is very useful to generate new ideas in students.

PHYSICAL AND GENERAL CHEMISTRY

- **CO1:** Basic concepts of this course will useful to understanding the concepts of higher classes
- **CO2:** This theoretical knowledge will useful in various industries
- CO3: Acquire knowledge of various states of matter, colloids, chemical bonding and stereo isomers which is useful in various fields
- **CO4:** This course is very useful to generate new ideas in students

ANALYSIS OF MIXTURE SALT LAB

- **CO1:** Get hands- on expertise in identifying the ions or radicals present in an unknown sample which will help in testing the sample of different kinds
- CO2: It is useful in tests and procedure to treat and diagnose patients
- **CO3:** Salt analysis is a chemical technique used to identify the ions present in a salt by analysing it's physical and chemical properties
- **CO4:** Much of our daily life is dependent on chemical analysis. So, it is very useful to generate new ideas in students

INORGANIC AND ORGANIC CHEMISTRY-2

- **CO1:** Obtain theoretical knowledge about metals and how they help in the preparation of various useful products.
- **CO2:** Gain knowledge about geometrical aspects of compounds, and chemistry about the man made elements.
- **CO3:** Get the knowledge of the bond nature of C-OH and C-X and how they are used in daily life and industries.
- **CO4:** Acquire the knowledge about carbonyl compounds, carboxylic acids and how they become backbone of organic chemistry.

TITRIMETRIC ANALYSIS AND ORGANIC FUNCTIONAL GROUP REACTIONS LAB

- **CO1:** Get hands-on expertise in determining the ions or radicals present in an unknown sample which will help in testing the samples of different kinds.
- **CO2:** Capable in creating healthy society through identifying the levels of different ions present in body fluids and other samples.
- **CO3:** Acquire the knowledge of reactions of some organic compounds by doing experiment.

SPECTROSCOPY AND PHYSICAL CHEMISTRY

- **CO1:** Acquire the knowledge of analysis of materials by using UV and Visible light which helps in identification of impurities and conjugation in organic compounds and biological macro molecules.
- **CO2:** Capable of identifying the functional groups present in organic molecules by using I.R. spectroscopy and molecular structure determination by using NMR spectroscopy which are useful in research.
- **CO3:** Determine the molecular weight of an unknown non-volatile compound by using colligative properties which is most important in knowing about new compounds.
- **CO4:** Acquire awareness on electrochemical aspects and their applications in various electrochemical techniques in determinations. Attain the knowledge on electrodes of and their applications in various electrochemical techniques in determinations, and the behaviour of various compounds in different phases at different conditions by using phase diagrams.

PHYSICAL CHEMISTRY AND IR SPECTRAL ANALYSIS LAB

- **CO1:** Acquire hands-on expertize about the usage of conductivitymeter instead of classical methods.
- **CO2:** Awareness on the interpretation of IR spectra which will be used in identifying the functional groups present in samples taken from different places.

INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY-1

- **CO1:** Get knowledge of complex compounds and some organic compounds, their structures, properties which are very useful in biology and analysis of unknown materials. Acquire Knowledge on the properties of bulk matter such as entropy, free energy etc.
- **CO2:** Can apply this knowledge in qualitative and quantitative analysis and in predicting the direction of spontaneous chemical transformations.
- **CO3:** Can analyse the chemical and thermodynamic properties of new compounds
- **CO4:** Can able to create new compounds depending on the requirement.

ORGANIC CHEMISTRY LAB

- **CO1:** Get hands-on expertise in identifying the functional groups present in an unknown sample which will help in testing the samples of different kinds.
- **CO2:** Capable in creating healthy society through identifying the different compounds present in body fluids and other samples.

INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY-2

- **CO1:** Get knowledge on the reactivity of complex compounds. Acquire knowledge about the preparation of heterocyclic compounds and carbohydrates.
- **CO2:** Can apply this knowledge in qualitative and quantitative analysis.
- **CO3:** Can analyse the importance of natural products in biological systems.
- **CO4:** Can able to create new conditions to speed up a reaction and to get high yields of desired compounds.

PHYSICAL CHEMISTRY LAB

- **CO1:** Get hands-on expertise in determining the some of the properties of a fuel by using viscometer and stalagmometer.
- **CO2:** Acquire knowledge about the rate of the reactions occur in human bodies which will be catalysed by enzymes.

ANALYTICAL METHODS IN CHEMISTRY

- **CO1:** Get aware of the different types of quantitative analysis which are very crucial in research and pharma industries.
- **CO2:** Obtain the knowledge of the processing of experimental data to find the error of analysis through significant figures.
- **CO3:** Attain the information on separation of miscible components by different techniques which are very essential in research and pharma industries.
- **CO4:** Acquire knowledge on how to know the number of compounds present in an unknown material which is very important in research and pharma industries.

ANALYTICAL METHODS IN CHEMISTRY LAB

CO: Acquire experimental knowledge about the determination of some ions which are useful for the life of living things.

ENVIRONMENTAL CHEMISTRY

- **CO1:** Get knowledge about how many types of natural resources are available for us to and how they are being polluted.
- **CO2:** Can apply this knowledge in various fields which cause pollution.
- **CO3:** Can analyse the reasons for pollution caused in various directions.
- **CO4:** Can able to create/develop methods to reduce the pollution.

WATER ANALYSIS LAB

CO: Get hands-on expertise in analyzing the water samples to know the parameters of water which will be helpful in identifying the water samples to be used for different purposes.

GREEN CHEMISTRY

- **CO1:** Realize the adverse effects caused by some chemical compounds and reactions and how to prevent/minimize of those by proposing new routes to synthesize the important compounds which are useful for mankind.
- **CO2:** Obtain the knowledge about some non toxic solvents used for chemical transformations.
- **CO3:** Attain the importance of electromagnetic spectrum in performing some of the crucial reactions in eco-friendly ways.
- **CO4:** Acquire the information of some catalysts which are not poisonous in the manufacturing of various industrial products.

GREEN CHEMISTRY LAB

CO: Obtain experimental knowledge of preparation of some important compounds in green methods by not producing harmful and hazardous chemicals into the environment for the safety of the society.

POLYMER CHEMISTRY

- **CO1:** Gain knowledge of very important class of compounds, polymers and their types.
- CO2: Obtain the knowledge about polymerization techniques and the molecular weight calculation.
- **CO3:** Acquire the information of properties of polymers.
- **CO4:** Attain information about additives to be used to prepare polymers which are useful for different purposes.

INSTRUMENTAL METHODS OF ANALYSIS

- **CO1:** Obtain the knowledge of the processing of experimental data to find the error of analysis.
- **CO2:** Acquire the knowledge of analysis of materials by using I.R. spectroscopy and its applications in quality assurance and quality control.
- **CO3:** Attain advanced knowledge on UV and Visible spectroscopy which helps in identification of impurities and conjugation in organic compounds and biological macro molecules in research.
- **CO4:** Get information about separation of mixtures by using latest developments in chromatography and molecular structure determination by mass spectroscopy.

ANALYSIS OF DRUGS, FOODS, DAIRY PRODUCTS & BIO-CHEMICAL ANALYSIS

- **CO1:** Acquire knowledge about the preparation and analysis of some important drugs used as antipyretics, analgesics, antibiotics and for the treatment of malaria, and tuberculosis.
- **CO2:** Attain knowledge about the preparation and analysis of some important antihistamine drugs.
- **CO3:** Obtain knowledge about the preparation and analysis of some important antiepileptic, anticonvulsant, cardiovascular drugs and diuretics.
- **CO4:** Understand the analysis of milk products and other food items and its importance in identification of adulteration through which to build a healthy nation.

FUEL CHEMISTRY AND BATTERIES

- **CO1:** Acquire knowledge about the renewable and non-renewable energy resources as fuels, their consumption and uses in various industries.
- **CO2:** Understand about the different types of petroleum products and their applications.
- **CO3:** Come to know how many useful compounds are present in crude petroleum, some synthetic fuels and lubricants
- **CO4:** Able to generate an electric current in an electro chemical cell which is basis of all batteries and fuel cells.

INORGANIC MATERIALS OF INDUSTRIAL IMPORTANCE

- **CO1:** Able to grasp the information about the manufacturing and properties of cement, glass and ceramics which are very useful in daily life and how to improve their qualities according the wishes of consumers.
- **CO2:** Can analyse the importance of various fertilizers used for different crops growth.
- **CO3:** Can apply the knowledge of surface coatings in various fields.
- **CO4:** Can able to create new explosives.

ANALYSIS OF APPLIED INDUSTRIAL PRODUCTS

- **CO1:** Acquire the knowledge of analysis of soaps, paints, oils, fertilizers, fuels, glass and cement.
- **CO2:** Can apply this knowledge in various industries.
- **CO3:** Can analyse the importance of fertilizers in agriculture for better yields of crops.
- **CO4:** Can able to create/develop new methods for determinations.

ORGANIC SPECTROSCOPIC TECHNIQUES

- **CO1:** Acquire the knowledge of the latest developments in NMR spectroscopy in the structure determination of organic compounds in research and other related fields.
- **CO2:** Understand the applications of NMR spectroscopy in different fields such as diagnosis, etc.
- **CO3:** Attain the theoretical basis of UV-Visible spectroscopy in structure determination of unsaturated compounds in research and pharma industry.
- **CO4:** Get the knowledge of ESR spectroscopy which is useful in the identification of free radicals in biological systems and other fields.

ADVANCED ORGANIC REACTIONS

- **CO1:** Acquire knowledge about the effect of light on different organic reactions and various physical and chemical processes involved in it.
- **CO2:** Understand the reaction mechanisms of various photochemical reactions to get important compounds in green method.
- **CO3:** Get knowledge on how to anchor some of the functional groups in chemical reactions at various levels to get desired products in good yields.
- **CO4:** Attain information about some recently invented reactions to prepare the important compounds.

PHARMACEUTICAL AND MEDICINAL CHEMISTRY

- **CO1:** Get aware of the terms used in pharmaceutical chemistry and their importance in drug industry and society.
- **CO2:** Obtain the information of some of the basic things about the drugs/medicines which are useful in prevention of some of the diseases.
- **CO3:** Acquire knowledge on the synthesis and activity of some important drugs used for the treatment of most occurring diseases and disorders.
- **CO4:** Get detailed knowledge about HIV-AIDS, its preventive methods, drugs used for that and thereto keep the society healthy and wealthy.

ORGANIC PREPARATIONS LAB

- **CO1:** Obtain experimental knowledge about the preparation of some drugs which are used for the society to diagnose, cure and prevent diseases.
- **CO2:** Skilled persons will be produced by whom pharma industry flourishes and so nation's wealth increases. i.e., employability will be achieved.
- **CO3:** Can able to analyse the routes, reagents and conditions used to get required compound in high yields.
- **CO4:** Can able to create new methods of preparation.

INSTRUMENTAL METHODS OF ANALYSIS LAB

- **CO1:** Acquire hands-on expertize about the usage of instruments instead of classical methods.
- **CO2:** Obtain knowledge about how errors are minimized during experiments using instruments.
- **CO3:** Get aware of some of the important instruments used in medicine for diagnosing some diseases in a very short time which is very useful for the patients and the welfare of the society.
- **CO4:** Skilled persons will be produced through which economy of the nation increases. Get employability skills and helps in life settlement.

PROJECT

CO: Get knowledge about how to do a project, how to do documentation and how to submit the dissertation.

B.SC ZOOLOGY

ANIMAL DIVERSITY NON CHORDATES

- **CO1:** Students are able to understand communicate the major evolutionary innovations in significance of associated morphologies and behaviors.
- **CO2:** Apply the knowledge external and internal characters of non-chordates.
- **CO3:** Students will able to analyzing economical importance of molluscans.
- **CO4:** Students will able to remember the ecological role of phylum protozoa, porifera, and helianthus, annelid.

ANIMAL DIVERSITY - CHORDATES

- **CO1**: To understand general characters and examples of chordates.
- **CO2:** To analyzing the fish migration, bird migration and their types.
- **CO3:** Students should be able to evolutes characters of urochordates, cephalo chordates and fishes.
- **CO4**: Students should be able to remember comparison of petromyzon and mixing.

CYTOLOGY, GENETICS AND EVOLUTION

- **CO1:** To understand the structures, functions and basic components of prokaryotic and eukaryotic cells.
- **CO2:** Students should be able to analyzing mandelian principles.
- **CO3:** Students are able to evolutes the human karyotyping, chromosome structure and types.
- **CO4**: Students are able to remembering Darwin finches (Micro evolution).

EMBRYOLOGY, PHYSIOLOGY AND ECOLOGY

- CO1: To understand gametogenesis, cleavage and different patterns to form zygote.
- CO2: To analyze the digestive events in mammalian digestive system.
- CO3: Students are able to evolutes the reasons of circulatory events of cardiac cycle.
- CO4: Students are able to remember how change in population affects the ecosystem

ANIMAL BIOTECHNOLOGY

- **CO1:** Through genetic engineering we can create new varieties of animals and new reproductive techniques in animals.
- **CO2:** To analyze industrial processes for production of antibiotics, enzymes etc.
- **CO3:** To understand social issues and scientific aspects through southern, northern, western blotting techniques and DNA finger printing.
- **CO4:** To evolutes factors that contribute in enhancement of micro organisms and produce formation during fermentation process.

ANIMAL HUSBENDARY

- **CO1:** Students are able to understand the mechanisms and role of reproductive physiology in live stock production
- CO2: Analyze different requirements of layers broilers and parent stock in terms of management.
- **CO3:** Evolutes feeding systems for form animal production and companion animal.
- **CO4:** students will remember the role of nutrition in animal production and health management.

IMMUNOLOGY

- **CO1:** To understand innate and adaptive immunity, cellular processes involved in inflammation and immunity.
- **CO2:** Students will able to analyzing antigens and antibodies.
- **CO3:** To evolutes factors that contribute in histocompatability complexes.
- **CO4:** To create vaccine and contributes to disease prevention.

CELLULAR METABOLISM AND MOLECULAR BIOLOGY

- **CO1:** To understand about the amino acids, carbohydrates, lipid types, structure and their classification.
- **CO2:** To analyze the metabolism of carbohydrates, through various anabolic and catabolic pathways like, glycolysis, kreb's cycle, and glycogen metabolism.
- **CO3:** Students are able to remembering DNA and RNA structure, types and their significance.
- **CO4:** To apply insight applications for transport functions of plasma membrane.

BIOINFORMATICS

- **CO1:** Students are able to understand aims and tasks of bioinformatics and their applications, challenges.
- **CO2:** Students are able to analyzed DNA and protein database sequencing techniques.
- **CO3:** To able to remembering drug discovery and target identification and validation.
- **CO4:** Students are able to evolutes the sequence alignment methods and tools applications.

CLINICAL BIOCHEMISTRY

- **CO1:** Students are able to understand glassware, solutions and reagents and their preparation.
- **CO2:** Analyzing the metabolism of carbohydrates, serum proteins, lipids through various anabolic and catabolic reactions.
- **CO3:** Students are able to remember enzyme classification and their properties, applications.
- **CO4:** To evolutes the factors about functional tests and clinical significance tests like kidney gastric analysis.

HEMATOLOGY

- **CO1:** Students are able to understand laboratory preparation in hematology.
- CO2: Apply principles of safety, quality assurance and quality control in hematology.
- **CO3:** Evolutes normal and abnormal cell morphology with associated diseases.
- **CO4:** To analyze principles and procedures of hematology tests to include source of errors and clinical significance of results.

CLINICAL MICROBIOLOGY

- **CO1**: Apply scientific principles and hypothesis testing in the design and execution of experiments in microbiology.
- **CO2:** Students are able to understand safe disposal strategies, sterilization and disinfection.
- **CO3:** Evolutes different types of culture media, staining reactions, cultural characteristics and biochemical properties.
- **CO4:** To analyze the basic principles of sero diagnostic tests, flocculation tests, ELISA, slide and tube agglutination tests.

PRINCIPLES OF AQUACULTURE

- **CO1:** Students should be able to analyze diagnose fish, prawn diseases and manage health and safety issues in aquaculture.
- **CO2:** To understand fresh, brackish and marine water aquaculture systems.
- **CO3:** Students are able to remember economical importance of pearal oysters.
- **CO4:** To evolutes the commercially important ornamental fishes and their breeding, economical value.

AQUACULTURE MANAGEMENT

- CO1: Students are able to understand different types of fish diseases, symptoms and their treatment.
- CO2: Applying aeration principles for emergency aeration of culture ponds.
- CO3: Students are able to remember induced breeding methods in fishes.
- CO4: students will able to analyzing feed strategies and feed management.

POST HARVEST TECHNOLOGY

- **CO1:** To understand the traditional and artificial preservation methods for fish products.
- **CO2:** To evolutes the impact of environmental factors on physical and chemical spoilages of fishes.
- **CO3:** Applying scientific principles in handling storage and transport methods for fishes.
- **CO4:** To analyzing sanitation in processing plant and processing workers health.

SERI CULTURE, MULBERY CULTIVATION AND MANAGEMENT

- **CO1:** To create awareness about the opportunities and employment in sericulture.
- CO2: Students are able to understand mulberry cultivation, silk worm rearing techniques.
- **CO3:** Evolutes different physical and chemical properties of soil and it's nature.
- **CO4:** Apply basic principles of leaf picking; shoot leaf harvesting, branch cutting, leaf storage in mulberry cultivation.

BIOLOGY OF MULBERY SILKWORM AND SILKWORM REARING TECHNOLOGY

- **CO1:** To create employability and job opportunities in the public and private and govt of silkworm rearing industries.
- **CO2:** Students are able to understand identify the mulberry silkworm diseases and pests.
- CO3: To evolutes the commercial parameters of cocoon for assessment of cocoon quality.
- **CO4:** Apply basic principles of mulberry cultivation form maintenance, seed technology, silk worm rearing, and silk reeling.

SILK TECHNOLOGY, SILK MARKETING AND EXTENSION

- **CO1:** Students are able to understand the terms of spinning, wearing, ginning, khitting.
- **CO2:** Evolutes the marketing organization traditional and regulated markets, their merits and limitations.
- **CO3:** Analyze economical and marketable strategies of silk industries.
- **CO4:** Students are able to remember silk extension

B.SC AQUACULTURE TECHNOLOGY

BASIC PRINCIPLES OF AQUACULTURE

- **CO1:** Students can able to create different aquaculture systems.
- **CO2:** They can evaluate the concept of ecology and pond eco-system.
- CO3: They analyze the classification of fish ponds
- CO4: Students can easily understand the preparation of pond and Field visit to hatchery

BIOLOGY OF FIN FISH & SHELLFISH

- **CO1:** Students are able to understand the classification of cultivable fin and shell fish.
- CO2: Students can analyze the food and feeding growth of fish
- CO3: Students can evaluate reproductive biology.
- CO4: Students can easily understand development of fishes, hormones and growth

FISH NUTRITION & FEED TECHNOLOGY

- **CO1:** Students can understand the nutritional requirements of cultivable fish.
- **CO2:** Create the knowledge in feed preparation and feeding habits.
- **CO3:** Students are able to evaluate fish feed manufacture and storage.
- **CO4:** Students analyze the estimation of protein content in aquaculture feeds

FRESH WATER & BRACKISHWATER AQUACULTURE

- **CO1:** Students can understand the present status of freshwater aquaculture and their role in world economy and food production.
- **CO2:** Create knowledge in life history stages of freshwater fish and prawn.
- **CO3:** Students gainanalytical and technical knowledge of prawn hatchery technology and brackish water species.
- **CO4:** They evaluate the carp and prawn culture and composite fish culture systems.

FISH HEALTH MANAGEMENT:

- **CO1:** To gain knowledge about economics of fisheries.
- CO2: To know about the changes in cell structure caused due to various diseases in fishes
- **CO3:** To know about the finfish diseases. To know about the shell fish diseases.
- **CO 4:** To gain knowledge about using diagnostictoolstodiagnosediseases infishes

FISHERIESEXTENSION, ECONOMICS & MARKETING

- **CO1:** Togainknowledgeabouteconomics offisheries.
- **CO2:** Toimprovetheknowledgeaboutfish marketingprocess. Toknow abouttheeconomicstatus offishermen.
- **CO3:** To improve knowledge about fisheriesextensionmethods. To know about welfare programmes offishermen.

ORNAMENTAL FISHERIES:

- **CO1:** knowledge on the ornamental fish breeding will be learnt by the student
- **CO2:** Learn about Management practices of ornamental fishes will be learnt.
- **CO3:** Able to gain knowledge on the aquarium maintenance and accessories.

FISHERY ENGINEERING:

- **CO1:** student gain knowledge on the FISHINGCRAFTS.
- **CO2:** To learn about Fishingaccessories, Nettingmaterials—natural and synthetic fishing gearmaterials and yarnnumbering system.
- **CO3:** student can undrtstand about Turtleexclusiondevices By-catchreductiondevices Destructiveandprohibitedfishingpractices
- CO4: Student learn about General maintenance of freezing plant and coldstorage iceplant

FISH PROCESS TECHNOLOGY:

- **CO2:** Students can understand the Fundamentalprinciplesinvolvedinchillingandfreezingoffish andfisheryproducts. Various freezing methods.
- **CO3:** Student learn about Packingandstorageofdriedproducts. Spoilageofdried products. Preventive measures. Standards for dry fish products. Cold smoking. Principles offreezedrying.
- **CO4:** student gain knowledge on Packing requirements for frozen and cured products. Statutory requirements for packing.

FISHERY MICRO BIOLOGY AND FISHERYBY-PRODUCTS

- **CO 1**: Student learn about Generalcharacteristicsofbacteria, fungi, viruses, algae and protozoans. Ultrastructure of prokaryotic cell—structure and function of bacterial cellwall, plasma membrane, capsule, flagella and endospore. Structure of fungiandy east cell.
- **CO3**: Students can understand the FishMicrobiology: Fishasanexcellentmediumforgrowth ofmicroorganisms.
- **CO4**: student gain knowledge on FisheryBy-Products:Fishmeal,fishproteinconcentrate,sharkfinrays,fishmaws, isinglass,fish liveroil,fish bodyoil,fish hydrolysates,chitin,chitosan,glucosamine hydrochloride,

QUALITYCONTROLINPROCESSINGPLANTS

- **CO1:**Qualitymanagement,totalqualityconceptandapplicationinfishtrade.Qualityassessment offishandfisheryproducts
- **CO2:** Students can understand the waterqualityinfisheryindustry,productquality,water analysis,treatments,chlorination,ozonisation,UVradiation,reverseosmosis,techniquesto removepesticidesandheavymetals.
- CO3: student gain knowledge on Fishprocessingunits
- **CO4:** Student learn about Hazards in fish foods .Laboratorytechniquesfor detectionandidentificationoffoodpoisoningbacteria.

CRUSTACEAN CULTURE

- **CO 1:** Student learn basics of crustacean cultures.
- **CO 2:** Student gain knowledge on important cultivable species of shrimp sand prawns, their food and feeding habit sand their reproductive biology.
- **CO 3:** student gain knowledge on Crustaceanscultureincages,re-circulatorysystems, ricefields and super intensiveandultra -intensivesystems.
- **CO 4:** Student learn about PondandLargeScalefarming;CompositeCulture; FarmingofCrabandLobster.

MOLLUSCANS AND SEA WEED CULTURE

- **CO 1:** Student acquires knowledge on taxonomy of molluscans.
- CO2: Student able to understand mollus culture and sea weed culture systems.
- **CO3:** Student able to understand the biological activity in recyclecling systems of essensial traces materials.
- **CO 4:** Student learn about the production of pearls from forming.

MARINE FIN FISHCULTURE

- **CO1:** Student learn about Important cultivable fin fish species.
- **CO2:** Classificationofculturesystems: ponds, pens, cages, raceways. Pond preparation and fertilization; eradicationofweedandPredatory finfishes
- CO3: student gain knowledge on Hatchery management
- **CO4:** Students can understand thorganicfarmingandtheirmanagement. Harvestingandpost-harvesting technologyofculturedfinfish.

ENGLISH

GENERAL ENGLISH-1

- **CO1-**The students attain a good knowledge on viewing society in inspirational way.
- **CO2**-This also inspires the student to know the colonizing nature of developed countries.
- **CO3**-Regarding poetry the philosophy of Robert frost and Nissim Ezekiel observation on society and his own life chances are shown as mirror to himself.
- CO4-Regarding short stories the Lost child of Mulkaraj Anand and Loaded Dog of Henry Lawson gives a picture on respect of parents and affectionate lively The one act play of William Shakespeare's: The Merchant of Venice (Court Scene) provides good analyzing skills. The one act play of William Shakespeare's: The Merchant of Venice (Court Scene) provides good analyzing skills.

GENERAL ENGLISH-2

- **CO1-**The students should attain good scientific point of view and their own hygienic idea on self.
- **CO2-**Regarding poetry the music of autumn season and kishwar Naheed Poetry gives an excellent impression on their own Aesthetic sense.
- **CO3-**The short stories of Ruskin Bond and R.K.Narayan's provide students a good idea on personalities in culture and civilization.
- **CO4**-The one act play of Anton Chekhov: The Proposal present good humour for the students.

GENERAL ENGLISH-3

- **CO1**-Regarding prose the students attain good idea on technology and how to improve public speaking.
- CO2-Regarding poetry the students develop a good idea and respect for elders and their culture.
- **CO3**-The short stories of Shashi Deshpande and Jhumpa Lahiri evaluate our own thoughts and dreams in reality.
- CO4-The one act play Kanyasulkam provides how our culture prevailed in ancient times.

COMMUNICATION AND SOFT SKILLS-1

- **Co1** Attains a common level in Prefixes and Suffixes, compounding words, analogy, Synonyms and Antonyms and Phrasal verbs.
- **Co2**-They could manage the Subject –verb agreement and could get knowledge on the Types of verbs.
- **Co3**-Student could get command on Articles and Prepositions and can do number of exercises on Tense present and past aspects.
- **Co4-**The Student will have a keen observation on Importance of Listening, Types of Listening Obstacles and strategies for effective listening.

COMMUNICATION AND SOFT SKILLS-2

- Co1-Students attain a good level of understanding on the sounds of English.
- Co2-Students could manage good intonation with beautiful word accent.
- **Co3-**The speaking skills will be improved with good conversation, interview, presentation and public speaking.
- Co4-The students possess good speaking skills with Role play, Debate and Group Discussion.

COMMUNICATION AND SOFT SKILLS-3

- **CO1**-Students attain good soft skills with positive attitude, good body language and their own SWOT analysis. They develop good emotional intelligence with netiquette manners.
- **CO2**-Students develop good paragraph writing with development of ideas and coherence with structure of paragraph.
- CO3-Students develop a material idea on paraphrasing and Summarizing.
- **CO4**-They learn techniques of paraphrasing and stages of Summarizing.

SANSKRIT

SANSKRIT POETRY

CO1: To identify and describe distinct charectristics of literary texts.

CO2: To analyze poetic works for their structure and meaning, using correct terminology.

CO3: To display a working knowledge of the genres of poetry by various writers from various cultures and historical eras.

CO4: To gain knowledge on effectively communicate ideas related to the poetic works during class and group activities.

SANSKRIT PROSE

CO1: To gain knowledge it is an important to know the prose forms from the Aranyakas and ancient Upanishads.

CO2:To gain ethical values by reading stories in Sanskrit prose like Panchatanta and Hitopadesa.

CO3:To Improve the knowledge and spoken skill.

CO4:To know the different varieties of people in conversation and inturn improve their knowledge and communication skill.

SANSKRIT GRAMMAR

CO1: By learning Sanskrit grammar one can write and speak correctly and effectively.

CO2: Communicationskills and vocabulary is developed while reading Sanskrit Grammar.

CO3: Able to read and write Devanagari script correctly.

DRAMA

CO1: To gain knowledge on the origin and development of Sanskrit drama.

CO2: To have Skill on conversational language(dialogue)

CO3: By reading Charectors in dramas one can gain knowledge on character building.

UPANISHADS

CO1: Importance of memory power through ancient oral teachings is recognised.

LITERATURE

CO1:By reading Sanskrit literature one can know the different types of literary aspects.

TELUGU

PAPER –I

OLD POETRY -

CO1: Students by studying read the old poetry, they got knowledge of gathering ethical values and improves the spoken skills.

CO2: To know how to write poems in Telugu

MODERN POETRY-

CO1: It improves creativity and imagination in writing poems and new trends in Modern Literature.

CO2: In poetry like Hiku, Mini kavita, and in prose to develop short stories in contemporary issues.

PROSE-

CO1: It improves story writing skills by reading of prose lessons the students will know the differences between old and new stories of telugu literature.

CO2: It helps to develop the sentence constructions in drafting.

GRAMMAR –

CO1: The Grammar knowledge improves the student's ability to understand Telugu language and Texts properly.

CO2: The Students have the better opportunities in the fields as Lyric writers, Script writers, Anchors, Oraters, in both Print and Electronic media.

HINDI

HINDI-1

- CO1 To develop sensitivity towards use of Hindi in the process of communication
- CO2 To have knowledge on grammatical aspects and punctuation marks for proper written communication
- CO3 To Utilize digital literacy tools to develop grammar skills.
- CO4 To Produce appropriate vocabulary and correct word forms to improve spoken and written communication in Hindi.

HINDI-2

- CO1 To improve the language skills further Listening, Speaking, Reading & Writing
- CO2 To understand the moral values and life skills taught indirectly through the lessons Poems, short stories, and essays
- CO3 To equip oneself with the improved communicative Hindi skills with practice in writing and speaking
- CO4 To develop creative thinking by going through the poetry, short stories, plays, etc.

HINDI-3

- CO1 To gain the ability to Produce appropriate vocabulary and correct word forms
- CO2 To Demonstrate ability to think critically by analysing the prescribed lessons from socio-cultural perspective
- CO3 To develop creative thinking by analysing the prescribed texts and attemping writing general essays in Hindi
- CO4 To develop interest in Hindi Literature by appreciating the prescribed as well as external works of literature through regular reading