PR GOVERNMENT COLLEGE (A), KAKINADA

PROGRAMME SPECIFIC OUTCOMES OF BIOLOGY STREAM COURSES

PROGRAMME	OUTCOMES
BZC	PSO1: To understand the nature and basic concepts of Botany, Zoology, Chemistry
	PSO2: To analyze the relationship among animals, plants
	PSO3: To perform procedures as per laboratory standards in the areas of Botany, Zoology, Chemistry
Biotech.Z.C	**PO1. Practical skills:** 1. Understand the importance of laboratory security as it applies to working with hazardous chemicals, biohazards, recombinant material, and general biotechnology security precautions. 2. Students will evaluate the accuracy of different types of measuring devices to accurate measure a solution. They will statistically analyze their data to determine the best measuring device to use. 3. Characterize isolated DNA and RNA using agarose gel electrophoresis and analyze agarose gel data 4. Perform basic microbiological techniques such as sterile plating and isolation of single colonies, culturing bacteria in liquid broth. 5. PCR amplify target genomic DNA and ligate into vector and transform bacteria with rDNA.
	PO2. Environment and sustainability: 1. Understanding of the causes, types and control methods for Environmental Pollution. 2. Application of different life forms in Environmental Remediation.
	PO3. Ethics: Apply ethical principles and commit to environmental ethics and responsibilities and norms of the environment
	PO4. Individual and team work: 1. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. 2. Elicit views of others, mediate disagreements and help reach conclusions in group settings.
	PO5. Knowledge and understanding of: 1. Students will be able design, conduct experiments, analyze and interpret data for investigating problems in Biotechnology and allied fields. 2. Describe how scientific methodologies are used to conduct experiments and develop products 3. The students understood the concept of cell and their activities
	PO6. Environment and sustainability: 1. Understanding of the causes, types and control methods for Environmental Pollution. 2. Application of different life forms in Environmental Remediation.
	PO7. Transferable skills:

	1. Use of IT (word-processing, use of internet, statistical packages and databases). 2. Communication of scientific ideas in writing and orally. 3. Ability to work as part of a team. 4. Ability to use library resources/Equipment. 5. Time management.
MBC	PSO1: To understand the nature and basic concepts of Microbiology, Botany, Chemistry
	PSO2 : To analyze the relationship of microorganisms, plants
	PSO3 :To perform procedures as per laboratory standards in the areas of Microbiology, Botany, Chemistry
B.Voc. COM.AQUA	**PO1. Knowledge and understanding of:** 1. learning about complete aqua culture systems and aquatic organisms 2. Identify and list out common carps. Understand the nature and basic concepts of biology, physiology of fish and shrimp 3. present scope and status of aquaculture
	PO2. Intellectual skills – be able to: 1 Plan, conduct and write a report on an independent term project. 2. Construct and test hypothesis. 3. Transfer of appropriate knowledge and methods from one topic to another within the subject.
	PO3. Practical skills: 1. Students learn to carry out practical work, in the field and in the laboratory, with minimal risk 2. identification of species 3. estimation of water parameters in aqua labouratory
	PO4. Ethics: 1. Apply ethical principles and commit to environmental ethics and responsibilities and norms of the biodiversity conservation.
	PO5. Individual and team work: 1. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. 2. Elicit views of others, mediate disagreements and help reach conclusions in group settings.
HBC	PSO1: To obtain basic knowledge regarding Horticulture, Botany, Chemistry
	PSO2 : To analyze the applications of Horticulture, Botany etc
	PSO3 :To perform green house management, garden development, landscaping, grafting techniques etc.
B.Voc. Horticulture	PSO1: To obtain basic knowledge regarding Horticulture, Botany, Chemistry
	PSO2 : To analyze the applications of Horticulture, Botany etc
	PSO3 :To perform green house management, garden development, landscaping, grafting techniques etc.