A.S.D.GOVERNMENT DEGREE COLLEGE FOR (W),(A), KAKINADA

DEPARTMENT OF BOTANY

2019-2020

Course outcomes :

Semester I -Paper-1 Microbial Diversity, Algae And Fungi

1. Students will be able to identify, compare and distinguish various groups of microbes and primitive plants based on their characteristics.
2. Analyze and ascertain the plant disease symptoms due to viruses, bacteria and fungi.
3. Classify fungi, lichens, algae ,Bacteria and Viruses based on their structure, reproduction and life cycles.
4. Illustrate diversity among the viruses and prokaryotic organisms and can categorize them
5. Evaluate the ecological and economic value of microbes and thallophytes

Semester –II -Paper- II Diversity of Archegoniatae and Plant Anatomy

1. Recall and explain the evolutionary trends among amphibians of plant kingdom for their shift to land habitat.
2. Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles
3. Evaluate the ecological, ethnic and economic value of different tracheophytes and summarize their goods and services for human welfare
4. Understand on the organization of tissues and tissue systems in plants
5. Understand the economic importance of local timbers –Teak ,Redsanders and Arjuna

Semester III -Paper-III Plant Taxonomy and Embryology

1. Critically understand various taxonomical aids for identification of Angiosperms.
2. Analyze the morphology of the most common Angiosperm plants of their localities and recognize their families
3. Illustrate and interpret various aspects of embryology
4. Identify the local angiosperms of the families prescribed to their genus and species level and prepare herbarium.
5. Understand about the principles and applications of palynology

Semester IV - PAPER –IV: Plant Physiology and Metabolism

1. Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants.
2. valuate the role of minerals in plant nutrition and their deficiency symptoms.
3. Interpret the role of enzymes in plant metabolism.
4. Critically understand the light reactions and carbon assimilation processes responsible for synthesis of foodin plants.
5. Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms.

Semester V -Paper-V: Cell Biology, Genetics and Plant Breeding

1. Distinguish prokaryotic and eukaryotic cells and design the model of a cell.
2. Explain the organization of a eukaryotic chromosome and the structure of genetic material.
3. Discuss the basics of Mendelian genetics, its variations and interpret inheritanceof traits in living beings.
4. Evaluate the structure, function and regulation of genetic material.
5. Understand the application of principles and modern techniques in plant breeding.

Semester V - Paper –VI Plant Ecology& Phytogeography

1. Discuss the basic concepts of plant ecology, and evaluate the effects of environmental and biotic factors on plant communities.
2. Appraise various qualitative and quantitative parameters to study the population and community ecology.
3. Correlate the importance of biodiversity and consequences due to its loss.
4. Enlist the endemic/endangered flora and fauna from two biodiversity hot spots in India and assess strategies for their conservation
5. Locate different phytogeographical regions of the world and India and can analyze their floristic wealth

Semester VI - Paper VII-(B): Elective [(A) Nursery, Gardening And Floriculture

1. Understand about Nursery Management and landscaping and different gardening styles
2. Make use of different plant propagation structures for plant multiplication.
3. Explore the specialized organs or asexual propagules in

some plants for theirproliferation.

4. Demonstrate skills on micropropagation of plants through vegetative propagationtechniques.
5. Understand about the cultivation practices of various Ornamental Plants

Paper VIII,-A-1 : Plant Diversity And Human Welfare

1. Understand the concept and levels of biodiversity

2. Correlate the importance of biodiversity and consequences due to Biodiversity loss .

3. Enlist the endemic/endangered flora and fauna from two biodiversity hot spots in India and assess strategies for their conservation

4. Understand about the various organizations involved in the conservation of Biodiversity

5. Elucidate the utilization and commercial aspects of Forestry

Paper VIII-A-2 : Ethnobotany And Medicinal Botany

1. Understand about the study of relationship between Plants and Humans
2. Learn about Phyto chemical significance of various Medicinal plant products
3. Elucidate the importance of Indigenous Medicinal sciences
4. Understand about the conservation strategies of Endangered and endemic medicinal plants
5. Emphasis the importance of Biopiracy and the value of various plants useful; for the mankind

Paper VIII-A-3: Pharmacognosy And Phytochemistry

1. Understand about different medicinal drugs obtained from Natural resources
2. Analyze Cultivation collection Extraction Isolation Bioassaying of Crude drugs of Natural origin
3. Understand about the Pharmacological actions of various drugs and drug Evaluation methods
4. Analyze the extraction of Alkaloids , Terpoinds , Phenolics etc.
5. Elucidate the significance of Aromatherapy and volatile oils