Course Outcomes Botany

PAPER:I: MICROBIAL DIVERSITY, ALGAE & FUNGI

- **CO1.** To know about the origin and evolution of life, formation of earth in the universe and existence of life on earth.
- **CO2.** To know about microbial diseases regarding to various micro organism in man, animals and plants.
- **CO3**. To gain knowledge on Algae for growing the populations with lot of Economic importance as food, fodder and feed etc.,
- **CO4**. To gain knowledge of fungi as pathogen causing many famines as in the past and to overcome and manage the fungal disease and protect the life forms on the earth.

PAPER: II DIVERSITY OF ARCHEGONIATES AND ANATOMY

- CO1. To Know the structure of non-vascular plants.
- CO2. To Know the importance of mass plants.
- CO3. To know the structure of vascular plants.
- **CO4**. To know the importance plant anatomy

PAPER III: PLANT TAXONOMY AND EMBRYOLOGY

- CO1. To acquire knowledge to maintain botanical garden worldwide.To acquire the knowledge of classification of the plants and the comparison, origin and
- CO2. evolution of angiosperms which are the most important species in our daily life.
- CO3. To acquire the knowledge of the development of embryo and structure.To know the pollination and fertilization methods to develop with new genetically
- CO4. combinations leading to new varieties.

PAPER IV: PLANT PHYSIOLOGY AND METABOLISUM

- CO1. To Know the Process of various metabolic activities in plant body
- CO2. To Know the process of photosynthesis and respiration
- CO3. to know the importance of phyto hormones
- CO4. To know the process of stress physiology

PAPER V: Cell Biology, Genetics and Plant Breeding

CO1. Knowing about the cell theory and typical eukaryotic and prokaryotic cells.

CO2. Identifying the differences between plant and animal cells through microscopic observations

CO3. Understanding the basic concepts of genetic material and it's physical and biochemical natures along with the replication of the genetic material

CO4. Understanding the basic concepts of inheritance of the characters from generation to generations and knowing the main basis for this.

CO5. Studying the significance and basis of recombination in inheritance

CO6. Getting the skills of constructing a genetic map from the frequencies of recombination and applying the concept of Linkage of genes.

CO7. Knowing the basic principles and methods of Plant breeding and their applications in the improvement of crops

PAPER VI: Plant Ecology & Phytogeography

CO1. Understanding the basic principles of the ecosystem structure and functions in relation to its dynamics

CO2. Observation of different types of ecosystem to appreciate the organization and operations responsible for the ecological balance

CO3. Knowing the facts about the ecological factors like light, soil, temperature etc.

CO4. Identifying the productivity of the ecosystem by understanding the concepts of energy production and its flow in the ecosystem.

CO5. Understanding the centers of distribution of plants by getting knowledge of basics in phytogeography.

CO6. Understanding the basics of Biodiversity, its importance, threats and methods of conservation.

PAPER VII: Organic Farming:

CO1. To appreciate the significance of organic farming

CO2. To understand the requirements for organic farming

CO3. To identify the nutritional requirements of crop production

CO4. To produce the compost and green manures

Ability for the: Identification of mineral deficiencies, Compost preparation techniques, Green manure cultivation methods, Application techniques of organic manures, To use them for the crop production

PAPER VIII A1: Plants and human welfare

CO1. Understanding the relation between plants and human beings.

CO2. Understanding Genetic diversity, Species diversity, Plant diversity at the ecosystem Agro biodiversity and cultivated plant taxa, wild taxa.

CO3. Knowing about the Management of plant biodiversity: Organizations associated with biodiversity management methodology for execution.

CO4. Appreciating the Environmental Impact Assessment (EIA), Geographical Information System

CO5. Getting awareness on Conservation of genetic diversity, species diversity

CO6. Appreciating the Importance of forestry, their utilization and commercial aspects

PAPER VIIIA2: Ethnobotany and Medicinal Botany

CO1. Understanding Ethnobotany as an interdisciplinary science and the relevance of ethnobotany in the present context.

CO2. Appreciating the role of ethnobotany in modern medicine with special example.

CO3. Understanding the role of ethnic groups in the conservation of plant genetic resources.

CO4. Getting knowledge about Biopiracy, Intellectual Property Rights and protection of traditional Knowledge.

CO5. Knowing about the History, Scope and Importance of Indigenous Medicinal Sciences like Ayurveda, Sidda and Yunani.

CO6. Understanding the Conservation strategies of endangered and endemic medicinal plants

PAPER VIII A3: Pharmacognosy and Phytochemistry

CO1. Understand the importance and role of pharmacognosy in determining the purity of crude drugs.

CO2. Know the methods of organoleptic and microscopic evaluation for the identification of crude drugs.

CO3. Knowing the secondary metabolite biosynthetic pathways.

CO4. Understand the methods for testing the secondary metabolites like alkaloids, phenols, flavonoids, tannins and sterols and applied the learnt knowledge in phytochemistry.

CO5. Known the use of enzymes, proteins and aminoacids as drugs.