B.Sc ., BOTANY(AS PER SEMESTER SYSTEM

COURSE OUTCOME:

After successful completion this course, the student will be able to:

SEMSTER-I PAPER-I Microbial Diversity, Algae and Fungi

1.To know origin of life on the earth.
2.Illustrate diversity among the viruses and prokaryotic organisms and can categorize them.
3.He will wellversed with classification of fungi, lichens , algae and their structure,
reproduction and life cycles.
4.Analyze ascertain the plant disease symptoms due to viruses,bacteria and fungi.Which
helps him to know the skill for identification of disease in field.
Practicals:
1.Demonstrate the techniques of use of lab equipment, preparing slides and identify the material
and draw diagrams exactly as it appears.
2.Observe and identify microbes and lower groups of plants on their own.
SEMESTER-II , PAPER-II Diversity of Archaegoniates 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. Justify evoluntionary trends in tracheophytes to adapt for land habitat.
4.Prepare and preserve specimens of local wild plants using herbarium techniques.
Practicals:

1.Identify,classify and compare Bryophytes,Pteridophytes and Gymnosperms based on their
morphology, anatomy and reproduction.

SEMESTER-III PAPER-III Plant Taxonomy And Embriology

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.Prepare and preserve specimens of local wild plants using herbarium techniques.

4.Illustrate and interpret various aspects and embryology.

Practicals:III

1.Exhibit skill of preparing slides,identifying the given twigs in the lab and drawing
figures of plant twigs,flowers and floral diagrams as they are.

2.Know the Technical Description of plant to identify more local plants.

SEMSTER-IV,PAPER-IV Plant Phisiology and Metabolism

1.Understand the process of translocation of solutes in plants.

2.Know the Nitrogen metabolism and its importance.

3. They will learn about the significance of lipids.

4.They will be able to understand brief outline of biosynthesis of aminoacids.

Practicals:

1.Understand the growth and developmental processes of plants.

2.Know about photosynthesis and Respiration in plants.

SEMESTER:V,PAPER:V Cellbiology,Genetics and Plant breeding

1.The eukaryotic cell cycle and mitotic and meiotic cell division.

2.Structure and organization of cell membrane.

3.Mendalian and neomendelian genetics.

4.To understand the different types of genetic interaction,multiple alleles
And quantitative inheritance etc.,

5.To introduce student with branch of Plant breeding for the survival and
humanbeing from starvation.
Practicals:V
1.Process of membrane transport and membrane models.
2.Understand the science of plant breeding techniques in the field.
PAPER-VI Plant ecology and 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.To know the flora of India geographically like Western ghats, Eastern ghats
and Himalaya regions.
4.Locate different phytogeographical regions of the world and India and can
Analyze their floristic wealth.
Practicals:
1.Apply principles of biogeography to predict and explaingeneral characterstics
of a plant community at any random point on the globe.
SEMESTER:VI,PAPER:VII Nursery, Gardening and Floriculture
1.Propagation by cutting , layering,budding and grafting.
2.Identification of flower crops, sowing of seeds and raising of seedlings.
Practicals:
1.Planning and designingof gardens, functional uses of plants in the landscape.
2. They learn the techniques and able to start their own nursery as self employment.
CLUSTER PAPERS:
PAPER:VIII A1 Plant diversity and Human welfare
1.Identification of exotic plant species,identification of forest trees based on the

Characteristics of bark, flowers and fruits.
2.Understanding the preservation methods of fresh and dry fruits.
3.Understanding the methods of safe disposal of biodegradable and non-
Biodegradable wastes.
PAPER:VIII A2 Ethnobotany and Medicinal plants
1.Identification of various plant parts used as medicines by ethnic groups.
2.Understanding the difference between ancient wisdom and modern system
of medicine,traditional medicine at the recue of curing drug resistant maladies
like malaria and viral diseases.
3.Understaning the role of spices in kitchen, their therapeutic role.
PAPER:VIII A3 Pharmocogancy and Phytochemistry
1.Identification of various plant parts used as medicines.
2.Isolation by chromatographic techniques.
3.Learning callus culture techniques.
4.Secondary metabolite enrichment and understanding ethno-pharmacological
Principles.