# MAHAMAYEE MAHILA MAHAVIDYALAYA, BERHAMPUR,GANJAM, ODISHA BOTANY COURSE OUTCOME

#### **COURSE OUTCOMES:**

CLASS: FIRST YEAR B.Sc. (CBCS PATTERN) SEMESTER -I

CC-I: 1. Microbiology and Phycology

On completion of the course, students are able to

- 1.know the concept of microorganisms that is bacteria, virus, cyanobacteria etc.
- 2. able to explore what is algae, their life cycle and economic importance.

CC-II: Bio molecules and cell Biology

On completion of the course, students are able to

- 1. To know about bio molecules and Bioenergetics.
- 2. Understand about chemical bonds, properties of water, PH, Buffers etc.
- 3. Able to understand the ultra-structure of typical plant cell and different types of organelles.

CLASS: FIRST YEAR B.Sc. (CBCS PATTERN) SEMESTER -II

CC-III: MYCOLOGY AND PHYTOPATHOLOGY

On completion of the course, students are able to

- 1. Ensure practical knowledge of mushroom cultivation
- 2. Understand study of Lichens and different types of fungi.
- 3. know the geo graphical distribution of plant diseases.

**CC-IV: ARCHEGONIATES** 

On completion of the course, students are able to

- 1. Know the unifying features of archaegoniates
- 2. Understand the origin and classification of Bryophyta, Ptreidophyta and Gymnosperm.
- 3. Understand about Geological time scale, Fossil and Fossilization process.

CLASS: SECOND YEAR B.Sc. (CBCS PATTERN) SEMESTER -III

CC-V: ANATOMY OF ANGIOSPERM

On completion of the course, students are able to

- 1. Know about organization of root and shoot apex.
- 2. Understand about Anatomy of Dicot and Monocot plant parts.
- 3. Study about epidermal tissue system, anatomical adaptation of Xerophytes and

## Hydrophytes.

## CC-VI: ECONOMIC BOTANY

On completion of the course, students are able to

- 1. Know about cultivated plants, cereals, legumes.
- 2. Study about spices, Drug yielding plants, Tobacco plants.
- 3. Study about Oil yielding plants, timber plants, and also about Natural rubber.

## **CC-VII: GENETICS**

On completion of the course, students are able to

- 1. Know about Mendelism.
- 2. Understand about inheritance and variation.
- 3. Study about fine structure of gene and its mutation.

## CLASS: SECOND YEAR B.Sc. (CBCS PATTERN) SEMESTER -IV

## **CC-VIII: MOLECULAR BIOLOGY**

On completion of the course, students are able to

- 1. Know about Griffith's, Hershey and chase, avery, Mcleod and Mc Carty's experiment that is
- DNA as the carrier of genetic information.
- 2. Understand about the Genetic code and Central Dogma of life.
- 3. Understand about the DNA replication processes.
- 4. Know about the processes of Protein synthesis (Transcription and Translation).

## CC-IX: PLANT ECOLOGY AND PHYTOGEOGRAPHY

On completion of the course, students are able to

- 1. Know about concept of different spheres of Space.
- 2. Know about study of soil profile.
- 3. Understand about model of Energy flow.
- 4. Understand about Phytogeographical Division of India.

#### **CC-X: PLANT SYSTEMATICS**

On completion of the course, students are able to

- 1.Study about plant identification, classification and Nomenclature.
- 2. Know about concept of Taxonomic Hierarchy.
- 3. Know about Phylogeny of Angiosperms.
- 4. Descriptive study about Magnoliaceae, Rosaceae, Poaceae, Orchidaceae.

CLASS: THIRD YEAR B.Sc. (CBCS PATTERN) SEMESTER -V

**CC-XI: REPRODUCTIVE BIOLOGY OF ANGIOSPERM** 

On completion of the course, students are able to

- 1.Study about pollen biology.
- 2.Study about male and female gametophyte.
- 3. Know about pollination, fertilization, endosperm development and embryology.

**CC-XII: PLANT PHYSIOLOGY** 

On completion of the course, students are able to

- 1.To know sugar translocation in phloem.
- 2. Understand about plant growth regulators.
- 3.Study about physiology of flowering and discovery of phytochrome.
- 4. Understand the importance of water relation in plant.
- 5. Evalute the rule of plant Nutrition their deficiency, symptoms and also know the mechanism of nutrition absorption and translocation

## **DSE-I: ANALYTICAL TECHINIQUES IN PLANT SCIENCE**

On completion of the course, students are able to

- 1. Study about microscopy, centrifugation, spectrophotometer and radioisotope.
- 2. Study about data analysis, representation of data, chi-square test and t-test.

#### DSE-II: NATURAL RESOURCE MANAGEMENT

On completion of the course, students are able to

- 1. Study about natural resources and sustainable utilization.
- 2. Student understand about renewable and non-renewable energy resources.
- 3. Understand about resource accounting.

CLASS: THIRD YEAR B.Sc. (CBCS PATTERN) SEMESTER -VI

CC-XIII: PLANT METABOLISM

On completion of the course, students are able to

- 1.Understand the metabolic reaction in plant.
- 2. Analyze the role of Nitrogen and Lipid in plant and their metabolism.
- 3. Understand the carbon assimilation process of photosynthesis.
- 4. Know the Respiration process in plants.

CC-XIV: PLANT BIOTECHNOLOGY

On completion of the course, students are able to

- 1. Know about plant tissue culture.
- 2. Know about recombinant DNA technology, Gene construction and Genome construction.
- 3.Study about application of Bio-technology in agricultural field and SUPERBUG.

## DSE-III: HORTICULTURE PRACTICES AND POST HARVEST TECHNOLOGY

On completion of the course, students are able to

- 1. Know about post-harvest technology of fruits and vegetables.
- 2. Know about documentation and conservation of germplasm.
- 3. Explore about tradition of gardening, irrigation method, hydroponics and propagation method.
- 4. Understand in about interesting idea about ornamental plants.

#### **DSE-IV: PROJECTS AND RESOURCE WORK**

On completion of the course, students develop basic understanding of preparation and presentation of different topic of small project related to the course.

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PRINCIPAL
MANAMAYEE MAHILA MAHAYIDYALAYA
STENAMPUR (GM.)