

**Department of Botany
Sarat Centenary College**

Teaching Assignment : 2023-2024

CBCS HONOURS

Semester V

Core Course 11 : Plant Physiology

Name of the teacher : Dr. Quazi Taheruzzaman

Unit 1: Plant-water relations
Unit 2: Mineral nutrition
Unit 3: Nutrient Uptake
Unit 4: Translocation in the phloem
Unit 5: Plant growth regulators
Unit 6: Physiology of flowering
Unit 7: Phytochrome , cryptochromes and phototropins
Practical

Core Course 12 : Plant Metabolism

Name of the teacher : Dr. K. M. Hasib

Unit 1: Concept of metabolism
Unit 2: Carbon assimilation
Unit 3: Carbohydrate metabolism
Unit 4: Carbon Oxidation
Unit 5: ATP-Synthesis
Unit 6: Lipid metabolism
Unit 7: Nitrogen metabolism
Practical

Discipline Specific Elective

DSE 1: Reproductive Biology of Angiosperms

Name of the teacher : Dr. Quazi Taheruzzaman

Unit 1: Introduction
Unit 2: Reproductive development
Unit 3: Anther and pollen biology
Unit 4: Ovule
Unit 5: Self incompatibility
Unit 6: Embryo, Endosperm and Seed
Units 7: Polyembryony and apomixis
Practical

DSE- 2 : Biostatistics

Name of the teacher : Dr. K. M. Hasib

Unit 1: Biostatistics
Unit 2: Collection of data primary and secondary
Unit 3: Measures of central tendency
Unit 4: Correlation
Unit 5: Statistical inference
Practical

Semester VI

Core Course 13 : Genetics & Plant Breeding

Name of the teacher : Dr. K. M. Hasib

Unit 1: Mendelian genetics and its extension

Unit 2: Extrachromosomal Inheritance

Unit 4: Variation in chromosome number and structure

Unit 5: Gene mutations

Unit 6: Fine structure of gene

Unit 7: Population and Evolutionary Genetics

Unit-8 : Plant Breeding

Unit 9: Methods of crop improvement

Unit 10: Inbreeding depression and heterosis

Unit 11: Crop improvement and breeding

Practical

Core Course 14: Plant Biotechnology

Name of the teacher : Dr. Quazi Taheruzzaman

Unit 1: Plant Tissue Culture

Unit 2: Recombinant DNA technology

Unit 3: Gene Cloning

Unit 4: Methods of gene transfer

Unit 5: Applications of Biotechnology

Practical

DSE-3 : Plant Evolution and Biodiversity

Name of the teacher : Dr. Quazi Taheruzzaman

Unit 1: Earliest forms of plant life

Unit 2: Evolutionary trends

Unit 3: Phylogeny of plants

Unit 4: Evolutionary theories:

Unit 5: Plant diversity

Practical

DSE-4 : Horticultural Practices and Post-Harvest Technology

Name of the teacher : Dr. K. M. Hasib

Unit 1: Introduction

Unit 2: Ornamental plants

Unit 3: Fruit and vegetable crops

Unit 4: Horticultural techniques

Unit 5: Landscaping and garden design

Field trip and Practical

Unit 6: Floriculture

Unit 8: Disease control and management

Unit 7: Post-harvest technology

Unit 9: Horticultural crops - conservation and management

Field trip and Practical