

Open Book Exam Question Paper –I
Subject - Botany
PAPER – PLANT PHYSIOLOGY
Session 2020-21

Q 1 - Explain the procedure of source and sink.

Or

Write the mechanism of transport of water organic and inorganic substances

Q 2 - Write short note on

1. Pigment system

2. CAM metabolism

Or

Write the following explanation on C₃ and C₄ cycle.

Q 3 - Define the procedure of glyoxalate cycle.

Or

Describe TCA cycle with steps.

Q 4 - Write short note on

1. Alkaloids

2. Phenolic acid

Or

Describe the Auxin hormone and its importance.

Q 5 – Write short note on

1. Salinity stress

2. Metal Toxicity

Or

Explain the method on photo periodism and floral induction

Open Book Exam Question Paper –II
Subject - Botany
PAPER – GENETICS & MALECULAR BIOLOGY
Session 2020-21

Q 1 – Explain in Situ hybridization.

Q 2 – Explain DNA Structure & A,B, & Z forms.

Q 3 – Mechanism of DNA damage & repair.

Q 4 – Write Notes on (1) Conjugation (2) Transduction

Q 5 – Explain Dna Replication

Q 6 – Explain Structure & role of t-RNA

Open Book Exam Question Paper –III

Subject - Botany

PAPER – PLANT REPRODUCTION & DEVELOPMENT

Session 2020-21

Q 1 – Explain Structure of Shoot Apical Meristem

Q 2 – Explain Determination of Phyllotaxy.

Q 3 – Write Short Notes on -

(1) Trichomes (2) Lateral Roots (3) Root Hair

Q 4 – Explain Megasporogenesis in plants.

Q 5 – Explain structure of Anthe.

Q 6 – Seed germination & seedling growth

Open Book Exam Question Paper –IV
Subject - Botany
PAPER – BIOTECHNOLOGY
Session 2020-21

Q 1 – Write the definition of biotechnology and describe Bioethics.

Or

Explain the patenting biotechnology invention.

Q 2 – Write the method on - (1) PCR (2) DNA sequencing.

Or

Explain the procedure of genetic engineering & gene cloning

Q 3 – Write about following –

1. Microinjection 2. Microbial Toxins 3. Direct gene transfer.

Or

Define Plant cell & tissue culture technique and explain in protoplast fusion.

Q 4 – Write short note on –

(1) Production of cyanobacterial biomass for food.

(2) Food & health care product.

Or

Define in culturing microorganism for the product of biomass.

Q 5 – Write short note:-

(1) Waste treatment (2) Strain improvement (3) Reactor Type.

Or

Write the procedure of biogradation & bioleaching.