



UNIVERSITY OF NORTH BENGAL
B.Sc. Honours Part-III Examination, 2021

BOTANY

PAPER-IX (REVISED NEW SYLLABUS)

Full Marks: 80

ASSIGNMENT

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

All symbols are of usual significance.

Answer any four questions from the following each within 600 words 20×4 = 80

1. Define conjugation. Describe with suitable diagram, how F^+ , F' and Hfr bacterial strains are produced during conjugation. 20
2. Define phytoalexins. Give examples. Discuss in brief, the biochemical plant defense against pathogens. 20
3. Discuss in brief, the role of artificial seed production and protoplast culture in crop improvement. 20
4. Describe in brief, the symptoms, causal organism, disease cycle and control measures for the following plant diseases: 20
 - (i) Brown spot of rice
 - (ii) Blister blight of tea
5. Write short notes on: 20
 - (i) Mechanism of biological control
 - (ii) Horizontal and vertical resistance
 - (iii) Role of PR proteins in plant defense
 - (iv) Ti plasmid and its significance.

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