

Time : 2 ½

Marks : 75

- N.B. 1. All question are compulsory.
2. Draw neat labelled diagram wherever necessary.
3. All questions carry equal marks.

- Q.1 Attempt any **two** of the following 15
- Give an account of post fertilization changes in the life cycle of *Batrachospermum*.
 - Describe the sexual reproduction in *Polysiphonia*.
 - Describe the asexual reproduction in *Vaucheria*.
 - Explain general characters of *Bacillariophyta*.
- Q.2 Attempt any **two** of the following 15
- Discuss the section of the gill in *Agaricus*. Add a note on the systematic position.
 - Describe the stages of life cycle of *Puccinia* in the secondary host.
 - Give a detailed account on the classification of basidiomycetes fungi up to orders.
 - Give a detailed account of the sporulating structures in Deuteromycetes.
- Q.3 Attempt any **two** of the following 15
- Describe in detail the symptoms, casual organism & disease cycle of loose smut of Jowar.
 - Explain disease cycle of tikka disease of groundnut.
 - Describe in detail symptoms, casual organisms & control measures of tikka diseases of ground nut.
 - Describe the symptoms, casual organism & disease cycle of Damping off disease.
- Q.4 Attempt any **two** of the following 15
- Give general characters of algae & fungi.
 - Write a detailed note on colony characters exhibited by bacteria.
 - Enumerate & explain steps involved in commercial production of antibiotics.
 - What is pure culture? Discuss any method of preparation of pure culture.
- Q.5 Attempt any three 15
- Systematic position of *Vaucheria*.
 - Clamp connections.
 - Conidia of *Alternaria*.
 - Control measures of Damping off disease.
 - Acid fast staining.
 - Streak plate method.
