

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 detailed account of development of cystocarp in *Batrachospermum*.
  - Describe the thallus & explain formation of tetrasporophyta in *Polysiphonia*.
  - Describe the modes of sexual reproduction in *Pinnularia*.
  - Explain general characters of Chrysophyta.
- Q.2 Attempt any **two** of the following 15
- Give an account of the vegetative mycelial characteristics in basidiomycetes.
  - Describe the development of the basidiocarp & basidium in *Agaricus*.
  - Describe the stages of life cycle of *Puccinia* on the primary host.
  - Describe mycelial characters & reproduction in *Alternaria*.
- Q.3 Attempt any **two** of the following 15
- Describe in detail diseases cycle of tikka diseases of groundnut.
  - Explain causal organism, symptoms and control measures of tikka diseases of groundnut.
  - Describe the symptoms, causal organism & diseases cycle of Damping off diseases.
  - Explain diseases cycle & control measures of loose smut of Jowar.
- Q.4 Attempt any **two** of the following 15
- Give general characters of Bacteria & Archebacteria.
  - Explain the principle & protocol for gram staining.
  - Explain steps involved in commercial production of alcohol.
  - Write a detailed note on colony characters exhibited by bacteria.
- Q.5 Attempt any **three** of the following 15
- Systematic position of *Vaucheria*.
  - Give an economic importance of Bacillariophyta.
  - Aecium of *Puccinia*.
  - Classification of *Agaricus*.
  - Control measures of Damping off disease.
  - Pour plate method.

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