

(3 Hours)

[Total Marks: 100]

N.B.: 1) All questions are compulsory.

- 2) Figures to the right indicate full marks.
- 3) Draw neat labelled diagrams wherever necessary.

Q.1 Answer any TWO of the following:

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- A) What is sterilization? Write a detailed note on sterilization.
- B) What is pure culture? Discuss any one method of preparation of pure culture.
- C) Write a detailed note on colony characters exhibited by bacteria.
- D) Discuss different media studied by you.

Q.2 Answer any TWO of the following:

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- A) Describe the thallus structure of *Vaucheria*. Add a note on its systematic Position. .
- B) Explain formation of tetrasporophyte in *Polysiphonia*.
- C) Write a note on development of Cystocarp in *Batrachospermum*.
- D) Explain the general characters of Bacillariophyta.

Q.3 Answer any TWO of the following:

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- A) Give the general characters of Basidiomycetes.
- B) Describe the stages in the life cycle of *Puccinia* observed on the primary host.
- C) With a neat labelled diagram, explain V.S. of gill in *Agaricus*.
- D) Give a detailed account of the sporulating structures in Deuteromycetes.

Q. 4 Answer any TWO of the following:

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- A) Give a general account of control of Chemical methods of plant diseases.
- B) Describe a detail the symptoms, causal organism, and disease cycle of "Leaf curl".
- C) Explain various Biological methods of plant diseases.
- D) Write a detail account of "Damping off" disease.

Q. 5 Write short notes on (any FOUR)

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- a) Principle of Gram's staining techniques.
- b) Economic Importance of Rhodophyta.
- c) Single cell structure of *Pinnularia*.
- d) Conidia of *Alternaria*
- e) Aecidium of *Puccinia*
- f) Control measures of "White Rust".
