

2020-21

Time - 3 hours

Full Marks - 60

*Answer all groups as per instructions.
Figures in the right hand margin indicate marks.
Draw labelled diagrams wherever necessary.*

GROUP - A

1. Fill in blanks. (all)

[1 × 8

- (a) Chemically each virus is composed of _____ and _____.
- (b) Bacteria are specialised _____ organisms.
- (c) Bacteria decompose the bodies of dead organisms and other organic wastes. This process is called _____.
- (d) _____ are called pioneer plants.
- (e) _____ is essential for Fertilisation in Moss.
- (f) _____ is popularly known as black bread mould.
- (g) _____ are seedless vascular plants.
- (h) Coralloid roots of Cycas have a _____ association with blue green alga like Nostoc and Anabaena.

P.T.O.

GROUP – B

2. Write notes on any eight of the following within two to three sentences each. [1½ × 8

- (a) Bacteriophage
- (b) Mesosome
- (c) Pyrenoid
- (d) Conceptacle
- (e) Fruticose Lichen
- (f) Protonema
- (g) Coralloid root of Cycas
- (h) Apogamy
- (i) Pinus Needle
- (j) Conifers

GROUP – C

3. Write notes on any eight of the following within 75 words each. [2 × 8

- (a) TMV
- (b) Heterocyst
- (c) Cell structure of Chlamydomonas

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- (d) Conjugation in Bacteria
- (e) Rhynia
- (f) Lichen Apothecium
- (g) Marchantia Gemma cup
- (h) Equisetum cone
- (i) Cycas Microsporophyll
- (j) Alternation of Generation

GROUP – D

*Answer **any four** questions within 500 words each.*

- 4. Describe the economic importance of Virus. [6]
- 5. Describe the genetic recombination in Bacteria. [6]
- 6. Describe the reproduction in Vaucheria. [6]
- 7. Describe the sexual reproduction in Funaria. [6]
- 8. Describe the life cycle of Agaricus. [6]
- 9. Describe the ecological and economic importance of Pteridophytes. [6]
- 10. Describe the life history of Cycas. [6]