

2022

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. Answer all questions and fill in the blanks as required. [1 × 8]
- (a) Major constituent of fungal cell wall is _____.
 - (b) _____ Fungus is called blue mold.
 - (c) White rust disease is caused by _____.
 - (d) In higher fungi, male gametes are produced as small, tiny, uninucleate, nonmotile structure called _____.
 - (e) When two or more genetically different types of nuclei occur in the same cell, it is called _____.
 - (f) When minute scales are attached superficially to the substratum, the lichen is called _____.
 - (g) Give the botanical name of any slime mold.

[2]

- (h) Name the most common disease symptoms exhibited by viral, bacterial, fungal infection.

GROUP - B

2. Answer any eight of the following within two or three sentences each. [1½ × 8

- (a) What are fairy-rings ?
- (b) What are Mycoherbicides ?
- (c) What is quarantine ?
- (d) What is VAM ?
- (e) What do you mean by Bioluminescent fungi ?
- (f) What is haplo-diplobiontic life cycle ? Give example.
- (g) What is rhizomorph ?
- (h) What are exogenous spores ?
- (i) What are Mycotoxins ?
- (j) Predacious fungi

GROUP - C

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

- (a) Perithecium

- (b) Clamp connection
- (c) Dikaryotisation in Basidiomycetes
- (d) Significance of Neurospora
- (e) Sexual Reproduction in Albugo
- (f) Fruiting bodies in slime molds
- (g) Etiology of citrus canker
- (h) Fungal biofertilizer
- (i) Internal structure of Lichen
- (j) Asexual reproduction in Rhizopus

GROUP - D

Answer any four questions within 500 words each.

- 4. Describe the life cycle of Albugo. [6]
- 5. Narrate the reproduction in Penicillium. [6]
- 6. Describe various types of spores produced by *Puccinia graminis tritici* and their development. [6]
- 7. Explain the sexual reproduction and structure of fruiting bodies of Lichen. [6]
- 8. Discuss the role of fungi in Biotechnology with suitable examples. [6]

[4]

9. Describe the causal agent, disease cycle and control of early blight of potato. [6]
10. Give an account of classification and types of plasmodia in slime molds. [6]