

M. Sc. 1st Semester Examination, 2024

MICROBIOLOGY

(Mycology)

PAPER — MCB-103

Full Marks : 25

Time : 1 hour

Answer **all** questions

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

GROUP—A

Answer any **two** questions from the following :

2 × 2

1. What is Ectendomycorrhiza ?
2. Why rRNA genes are important for the study of fungal taxa ?

(Turn Over)

3. Why mycorrhizal association is obligatory during orchid seed germination ?
4. Name one antifungal and one antibacterial antibiotic and their producing fungi.

GROUP – B

Answer any **two** questions from the following :

5. Write notes on : 4 × 2
2 + 2
 - (a) VAM
 - (b) Biopesticides
6. Mention the difference between ecto-mycorrhiza and endo-mycorrhiza.
7. Describe : 2 + 2
 - (a) The role of mycorrhiza in agriculture and forestry
 - (b) Non-ribosomal peptides as secondary metabolites.

(3)

8. How can yeast adapt to a new environment ?

GROUP – C

Answer any **one** question from the following :

9. Write the differences between primary and secondary metabolites. Discuss the role of two secondary metabolites belonging to Polyketides family. 8 × 1
10. Discuss different molecular techniques used in Current mycological typing methods. 2 + 3 + 3
- 8

[Internal Assessment – 05 Marks]

