

2025

M.Sc. 3rd Semester Examination

BOTANY

**Applied Mycology and
Plant Pathology**

Paper : BOT - 303B/303F

Special Paper

(Old Syllabus)

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Paper : BOT - 303B

(Applied Mycology)

Group - A

Answer any *four* questions : 2×4=8

1. What are the targets and source of strobilurins?
2. Penicillin only destroys actively growing bacteria not dormant. Why?
3. What are the targets and mode of action of sordarin?
4. Mention the sources of malic and succinic acid.

P.T.O.

(2)

5. Name two first generation cephalosporins.
6. How tempeh is prepared?

Group - B

Write short notes on any *four* : $4 \times 4 = 16$

7. Cyclosporin
8. Quorn
9. Gluconic acid
10. Cheese production
11. SCP obtained from fungi
12. Fumaric acid

Group - C

Answer any *two* question : $8 \times 2 = 16$

13. Briefly describe the exogenous and endogenous dormancy of fungal spores. $4+4$
14. Discuss the mechanisms by which arbuscular mycorrhiza show beneficial effects.
15. Describe the production of cephalosporins and itaconic acid. $4+4$
16. Write a note on penicillin production.

Internal Assessment : 10 marks

(3)

**Palaeobotany, Palynology & Plant
Reproductive Ecology**

Paper : BOT - 303F

(Palaeobotany)

Special Paper

(Old Syllabus)

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *four* questions : 2×4=8

1. What are primary and secondary formed rocks?
2. What is meant by 'dip' and 'strike' of a b?
3. What are silt and clay?
4. What is meant by lithostratigraphy?
5. Name two megafloral elements of Barren Measure.
6. Who proposed the method of radio-carbon dating of rocks? Write down the mathematical expression of formation of radio carbons in cosmos.

P.T.O.

(4)

Group - B

Answer any *four* questions : $4 \times 4 = 16$

7. What is meant by principle of superposition of rocks? What are 'dip' and 'strike' of a bed? What is geologic clock?
8. Enumerate the miofloristics recovered from Talchir and Barakar formations.
9. Write a comparative account of the megafloristics of Raniganj and Parsora formations.
10. What are stromatolites? Mention their importance.
11. Write a brief note on distribution of Tertiary strata in India.
12. Describe the flora occurred during Mesozoic era.

Group - C

Answer any *two* question : $8 \times 2 = 16$

13. What is meant by Gondwana sequence? Write down the basis of two fold classification of Indian Gondwana sequence. Discuss the mega floristics of Tiki and Hartala hill formations. $2+2+4$
14. Describe the plant succession that had occurred during Siluro-Devonian period.
15. What is meant by stratigraphy? What is local section? What are homotaxial beds? How plant mega-fossils

(5)

support in understanding different local sections of a
given area? 2+1+1+4

16. Discuss in detail the Precambrian life-forms.

Internal Assessment : 10 marks
