M.Sc. (Final) DEGREE EXAMINATION, DECEMBER 2008.

Second Year

Botany

Paper V — DEVELOPMENT BIOLOGY OF ANGIOSPERMS AND ETHANOBOTANY

Time : Three hours **Maximum : 100 marks**

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE questions.

Each question carries 8 marks.

1. Male gametophyte.

2. Apomixis.

3. Vascular bundle.

4. Cork.

5. Endemic species.

6. Included phloem.

7. Biodiversity of sacred groves.

8. Phytomedicines.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

9. (a) Write a critical account on the double fertilization in Angiosperms.

Or

(b) Write an essay on polyembryony and add a note on its significance.

10. (a) What are meristems? Give an account of their cellular structure, distribution and functions in plants.

Or

(b) What is anomalous secondary growth? Describe the anomalous secondary growth using suitable example.

11. (a) Give an account of sacred groves and their biological significance.

Or

(b) Write about the scope and importance of traditional medicine in India.

12. (a) Write about scientific evaluation of medicinal plants used by tribal people.

Or

(b) Discuss the importance of phytochemicals in modern medicine.

(DBOT 22)

M.Sc. (Final) DEGREE EXAMINATION, DECEMBER 2008.

Second Year

Botany

Paper VI — MICROBIOLOGY, MYCOLOGY AND PLANT DISEASES

Time : Three hours **Maximum : 100 marks**

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE questions.

Each question carries 8 marks.

1. Chemoautotrophy.

2. Classification of viruses.

3. Asexual reproduction in zygomycotina.

4. Basidiocarp.

5. Symptoms caused by plant pathogenic fungi.

6. Plant disease indexing.

7. Brown rot of potato.

8. Citrus canker.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

9. (a) Discuss the role of bacteria in nitrogen cycle.

Or

(b) Describe the morphology and ultra structure in relation to function of bacterial cell.

10. (a) Give an account of the economic importance of fungi.

Or

(b) Discuss the recent trends in the classification of fungi.

11. (a) Discuss the role of enzymes and phytoalexins in pathogenesis in plants.

Or

(b) Give an account of fungal disease development in plants.