

(DBOT 21)

M.Sc. DEGREE EXAMINATION, MAY 2011.

Second Year

Botany

Paper V — DEVELOPMENT BIOLOGY OF
ANGIOSPERMS AND ETHNOBOTANY

Time : Three hours

Maximum : 100 marks

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE questions.

Each question carries 8 marks.

1. Microsporogenesis.
2. Development of embryo sac in *Lilium*.
3. Root stem transition.
4. Cambium.
5. Biodiversity in sacred grooves.
6. Traditional medicines.
7. Importance of ethnobotany.
8. Threatened medicinal plants.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

9. (a) Write a note on development of female gametophyte in angiosperms. What is the significance of different components in the process of fertilization?

Or

- (b) Describe the methods of pollination and elaborate the process of incompatibility.

10. (a) Describe the concept of meristems. Describe the changes in the activity of cambium.

Or

- (b) Describe anomalous secondary growth with suitable examples.

11. (a) What are the sacred grooves, and why they are important in conservation of biodiversity. Write a note on sacred grooves of Andhra Pradesh.

Or

- (b) Write a note on history of traditional medicines in India. Describe some of the medicinal plants of Andhra Pradesh.

12. (a) Describe the cultivation of medicinal plants in AP.

Or

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