

25012

M.Sc. DEGREE EXAMINATION, MARCH/APRIL 2019.

SECOND SEMESTER

Botany

PAPER II – PLANT REPRODUCTION

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Endogenous clock
2. Floral meristems
3. Structure of pollen wall and features.
4. Structure of ovule
5. Double fertilization
6. Somatic hybridization
7. Apomixis
8. Factors regulating seed dormancy

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Genetic and molecular analysis of flower development.
Or
10. Write in detail about regulation of flowering by Photoperiodism and Vernalization.
11. What is embryo sac? Give in brief about different types of embryo sacs in plants with examples.
Or
12. Explain briefly about microsporogenesis.

13. What is endosperm? Write structure, development, types and functions of endosperms.

Or

14. What is self incompatibility? Write biological significance and methods to overcome incompatibility.

15. What is Polyembryony? Write causes, types and applications of Polyembryony.

Or

16. Explain in detail about Embryogenesis.

