

25011

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

SECOND SEMESTER

BOTANY

Paper I — PLANT DEVELOPMENTAL BIOLOGY

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. Quiescent center.
2. Position and activity of cambium.
3. Abscisic acid.
4. Ethylene.
5. Stomata.
6. Bicollateral vascular bundles.
7. Nitrogen fixation.
8. Senescence.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 page.

9. Give brief an account of organization of shoot apical meristem(SAM).

Or

10. What is anomalous secondary growth? Write concise account of anomalous secondary growth in plants.

11. What are Auxins? Write structure, biosynthesis and role of Auxins in plants.

Or

12. Write about Cytokinins structure, types and biological roles.

13. What is Phtochrome? Write briefly structure, function and mechanism of action of Phtochrome.

Or

14. What is ecological anatomy? Explain role of anatomy in relation to taxonomy.

15. What is PCD? Write about concept, mechanism and developmental and stress induced PCD.

Or

16. What is Photosynthesis? Write in detail about light reaction.

