

DECEMBER 2014

P/ID 40225/PBTE

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

Each answer should not exceed 50 words.

Write short notes on :

1. Pollen Kitt.
2. Hypostase.
3. Syngamy.
4. Ruminant endosperm.
5. Totipotency.
6. Paleopalynology.
7. Quiescent centre.
8. Rystidome.
9. Growth rings.
10. Laticiferous ducts.

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

Each answer should not exceed 250 words.

11. (a) Give an account on functions of tapetum.

Or

- (b) With a neat labelled diagram, describe the structure of Ovule'.

12. (a) Comment on heterofertilization.

Or

- (b) Give an account on endosperm haustoria.

13. (a) Describe the development of dicot embryo.

Or

- (b) Give an account on anther culture.

14. (a) What is palynology? Explain the recent advances in palynological studies.

Or

- (b) Give an account on fusiform and ray initials.

15. (a) Write a detailed account on xylery elements.

Or

- (b) Give an account on unilacunar and multilacunar node.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

Each answer should not exceed 500 words.

16. (a) Discuss in detail the methods of Pollen storage.

Or

- (b) Give an account on types of Embryo Sac.

17. (a) Discuss in detail, the post fertilization changes.

Or

- (b) Give a detailed account on Apomixis.

18. (a) Give a detailed account on protoplast culture.

Or

- (b) Give an account on nuclear cytoplasmic interaction.

19. (a) Discuss in detail the theories of shoot apex.

Or

(b) Discuss in detail the Ontogeny and differentiation of problem components.

20. (a) Give an account on secretary cells. Add a note on its significance.

Or

(b) Write short notes on :

(i) Tyloses.

(ii) Kranz anatomy.