

OCTOBER 2011

**P/ID 40225/PBTE**

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Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 50 words.

Write short notes :

1. Endothecium.
2. Archesporium.
3. Campylotropus ovules.
4. Nucellus.
5. Bisporic embryo sac.
6. Antipodal cells.
7. Embryoids.
8. Pollen allergy.
9. Histogens.
10. Tyloses.

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 250 words.

11. (a) Briefly explain microsporogenesis.

Or

(b) Mention the features of pollen sterility.

12. (a) Briefly describe the process Apomixis.

Or

(b) Write note on endosperm haustoria.

13. (a) Bring out the methods of media preparations for plant tissue culture.

Or

(b) Describe the ovary culture.

14. (a) Write a note on aeropalynology.

Or

(b) What are the role of palaeopalynolgy in coal formation?

15. (a) Explain the structure of primary phloem.

Or

- (b) Briefly describe the nodal anatomy.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 500 words.

16. (a) Write an essay on Megasporogenesis.

Or

- (b) Narrate the process of syngamy and triple fusion.

17. (a) Differentiate the dicot and monocot embryos during their development.

Or

- (b) Write an essay on protoplast culture.

18. (a) Describe the flower vasculature in plants.

Or

- (b) Give a detailed account on origin and development of vascular cambium.

19. (a) Explain the theories of root tip organization.

Or

(b) Write a detailed account on anomalous secondary growth in dicots.

20. (a) Give an account on conservation of endangered plants in India.

Or

(b) Write an essay on secretary cells and tissues in plants.

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