

OCTOBER 2012

P/ID 40223/PBTC

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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 on.

1. Taxus baccata.
2. Gondwana land.
3. Cupulate fructification.
4. Megasporophyll.
5. Algal zone.
6. Ephedrine.
7. Poa cordaites.
8. Endarch.
9. Pycnoxylic wood.
10. Fossil fuel.

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 250 words.

11. (a) Give the salient features of Gymnosperms.

Or

(b) How will you differentiate Gymnosperms from Pteridophytes?

12. (a) Describe the structure of female gametophyte of Cycas.

Or

(b) Discuss the salient features of Taxales.

13. (a) Enumerate the angiosperm like features of Gnetum.

Or

(b) Write notes on

(i) Male flower of Ephedra

(ii) External Morphology of sporophyte of Ephedra.

14. (a) Enumerate the contributions of prof. Birbal Sahni.

Or

- (b) Write an account on the study of fossils in understanding evolution.

15. (a) Discuss the structure of Rhynia.

Or

- (b) Comment on Calamostachys.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 500 words.

16. (a) Give an account on the evolution of the steles in Gymnosperms.

Or

- (b) Trace the evolution of the male gametophyte in gymnosperms.

17. (a) Gnetum is a unique taxon of Gnetales. Discuss.

Or

- (b) Give an illustrated account of the anatomy of Ephedra stem.

18. (a) Describe general morphology of Calamites and Sphenophyllum.

Or

(b) Write an essay on the origin and evolution of seed habit.

19. (a) Give an illustrated account of the structure of Lyginopteris.

Or

(b) Describe the structure of Lagenostroma.

20. (a) Give an illustrated structure of Heterangium.

Or

(b) Explain the structure of Medullosa.

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