



Date: 02-04-2019
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART- A

Answer the following, each within 50 words.

(10 x 2=20 marks)

1. Differentiate Eusporangium and Leptosporangium.
2. Define siphonostele.
3. Write the economic importance of *Azolla*.
4. Comment on the leaf arrangement of *Marsilea*
5. List the xerophytic characters of Gymnosperms.
6. Mention any two characters of Conferrales.
7. Write a note on coralloid roots.
8. What is the use of Canada balsam?
9. Write short notes on the contribution of BirbalSahni.
10. Define petrification.

PART- B

Answer the following, each within 500 words. Draw diagrams wherever necessary.

(5 x 7=35 marks)

11. a. Write the significance of heterospory.

(Or)

- b. Enumerate the salient features of Pteridophytes.

12. a. Write short notes on cone of *Equisetum*.

(Or)

- b. Describe the structure of rhizome of *Marsilea*.

13. a. Explain the economic importance of Gymnosperms.

(Or)

- b. Write brief notes on affinities of Gymnosperms and Angiosperms.

14. a. Explain briefly the anatomy of *Pinus* needle leaf.

(Or)

- b. Write the angiospermic features of *Gnetum*.

- 15.a. Give an outline on the Geological time scale.

(Or)

- b. Illustrate the structure of *Calamites*.

PART- C

Answer any three of the following, each within 1200 words. Draw diagrams wherever necessary.

(3 x 15=45 marks)

16. Give an account of stellar evolution in Pteridophytes
17. Discuss the morphological nature of sporocarp of *Marsilea*
18. Enumerate the salient features of Cycadales and Gnetales
19. Describe the structure of male and female cone of *Cycas*.
20. Explain the types of fossils and the process of fossilization

