



QP CODE: 22001584



22001584

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, JULY 2022

First Semester

M Sc BOTANY

CORE - BY010104 - GYMNOSPERMS, PALEOBOTANY AND EVOLUTION

2019 ADMISSION ONWARDS

0311783C

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Write five major characteristics of Gnetopsida.
2. Describe the structure of *Caytonia*.
3. Describe the salient features of Medullosaceae.
4. Describe salient features of *Cycas* wood.
5. Give five salient features of family Pinaceae.
6. Write any five secondary metabolites extracted/derived from Ginkgo.
7. What are petrified fossils?
8. What you meant by sub-climax and climax dispersal.
9. Comment on morphological and physiological evidences of biome evolution.
10. Comment on symbiosis.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Write a note on living gymnosperms in India with special reference to Cycadales and Coniferales.
12. Explain angiospermic characters of *Gnetum* and justify that *Gnetum* is a Gymnosperm.
13. Give an account of the family Ephedraceae.
14. Comment on food supplements of Gymnosperms.
15. Explain the methods used in plant fossil studies.





16. Briefly describe the origin of species.
17. Explain Baldwin effect.
18. Mention the role of hybridization in evolution of species.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Describe the salient features of the family Araucariaceae.
20. Explain the morphology, wood characteristics and reproduction of *Taxus*.
21. Discuss "Earth through time".
22. Explain species concept and mode of speciation.

(2×5=10 weightage)

