

2022
M.Sc.
Fourth Semester
DISCIPLINE SPECIFIC ELECTIVE – 03
BOTANY
Course Code: MBOD 4.11(B)
(Phytogeography & Evolution)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Elaborate on the dispersal of land plants with emphasis on barriers and means of overcoming barriers. 14
2. Write a note on the following: 7×2=14
 - (a) Endemics
 - (b) Disjunct distribution

UNIT-II

3. Write a note on the evolution of sex in plants. Discuss the role of genes in the evolution of sex organs in plants. 14
4. Write short notes on the following: 7×2=14
 - (a) Parthenogenesis and its application
 - (b) Alternation of generations

UNIT-III

5. Describe the various phytogeographic regions of India. 14
6. Describe the general features of a native taxon. Describe the naturalization of exotic taxa and its impact on the ecosystem. 6+8=14

UNIT-IV

7. Describe the geographic patterns of distribution of land plants on a global scale. 14
8. Give an account of the centres of diversity of plants with suitable examples for each centre. 14

UNIT-V

9. What is the biological species concept? Write an elaborate note of the types and mechanisms of speciation. 2+12=14
10. Write short notes on the following: 7×2=14
 - (a) Main arguments of Darwin in the origin of the species
 - (b) Inbreeding depression
