

D2ABT2202

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Name.....

Reg.No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2023
(Regular/Improvement/Supplementary)

BOTANY

FBOT2C05: GENETICS, BIOSTATISTICS, PLANT BREEDING AND EVOLUTION

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries 2 weightage.

1. Describe origin of species.
2. Differentiate between RBD & LSD.
3. Explain breeding for drought resistance.
4. Define linkage map and interference.
5. Differentiate between F – test and t – test.
6. Define Hardy-Weinberg Principle. What are the factors affecting genetic equilibrium?
7. Mention the merits, demerits and achievements of clonal selection.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries 3 weightage.

8. Describe transposable elements in Maize.
9. Write short notes on diagrammatic and graphic presentation of data.
10. Describe Allopolyploidy breeding with suitable example.
11. Explain theorems of Probability.
12. Write notes on procedure and achievements of Plant Introduction.
13. Evaluate the experimental evidences of origin of life.
14. Write notes on gene mapping in bacteriophages.

(4 × 3 = 12 weightage)

Part C: Answer any *two* questions. Each carries 5 weightage.

15. Briefly explain Mutation breeding.
16. Explain Polygenic inheritance with suitable example.
17. Describe theories of evolution.
18. Explain the statistical softwares mentioned in syllabus. How are they applied in data analysis?

(2 × 5 = 10 weightage)