

2021
B.A./B.Sc.
Fifth Semester
DSE – 1
BOTANY
Course Code: BOD 5.11
(Plant Breeding)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Explain in detail the mode of sexual reproductions in crop plants. 14
2. Discuss the objectives of plant breeding point wise. 14

UNIT-II

3. Write note on mass selection. 14
4. What is a pure line selection? Write the procedure for pure line selection. 14
Mention the merits and demerits of pure line selection.

UNIT-III

5. Discuss briefly the inheritance of skin colour in man with suitable example. 14
6. Explain in details with appropriate example the inheritance of quantitative characters. 14

UNIT-IV

7. Define heterosis. Discuss the theories to explain heterosis and inbreeding depression. 2+12=14
8. Define inbreeding and its effects. Discuss in brief the occurrence of inbreeding depression and its application. 4+10=14

UNIT-V

9. Explain in details the colchicine treatment method in autopolyploidy. 14

10. Discuss some important points on:

7×2=14

- (i) Techniques for production of distant hybrids
 - (ii) The applications of distant hybridization in crop improvement
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