

Exam. Code : 210003

Subject Code: 4911

M.Sc. Botany 3rd Semester (Batch 2020-22)

PLANT BREEDING & IPR

Paper—BOT-C614

Time Allowed—3 Hours] [Maximum Marks—50

Note :— Attempt FIVE questions in all, selecting at least ONE question from each section. The FIFTH question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Define :—
 - (a) Domestication
 - (b) Centres of origin
 - (c) Quarantine
 - (d) Male sterility. 2.5×4=10
2. (a) Explain self-incompatibility and its mechanism.
(b) Explain sexual reproduction and how it is helpful in generating and fixing genotype variation. 5×2=10

2406(2221)/IZ-8995

1

(Contd.)

SECTION—B

3. Write notes on :—
 - (a) Hybrid varieties
 - (b) Clonal selection
 - (c) Merits of Mass selection
 - (d) Cross-pollination. 2.5×4=10
4. What is hybridization ? Explain its objectives and types. Describe the mechanism of hybridization in crops. 10

SECTION—C

5. Write notes on :—
 - (a) Correlation coefficient
 - (b) Classification of resistance. 5×2=10
6. Explain :—
 - (a) Multi-comparison test
 - (b) Discriminant function. 5×2=10

SECTION—D

7. Write brief notes on :—
 - (a) Mutation
 - (b) Polyploidy
 - (c) Biosafety
 - (d) Intergeneric hybrids. 2.5×4=10
8. (a) Role of genetic engineering in crop improvement.
(b) Discuss merits and demerits of Intellectual Property Rights. 5×2=10

2406(2221)/IZ-8995

2

100