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SA—06—2025

FACULTY OF SCIENCE

B.Sc. (Third Year) (Sixth Semester) EXAMINATION

APRIL/MAY, 2025

(CBCS New Pattern)

BOTANY

Paper—XIV

(Genetics and Plant Breeding)

(Tuesday, 8-4-2025)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt *all* questions.

(ii) Draw neat and well labelled diagrams wherever necessary.

1. What are duplicate genes ? Explain with suitable example. 15

Or

Describe in brief :

(a) Sex-linked inheritance with reference to haemophilia in man. 8

(b) Allopolyploidy with reference to hexaploid wheat. 7

P.T.O.

2. What is mutational breeding ? Describe procedure and applications of mutational breeding. 15

Or

Explain in brief :

- (a) Mass selection 8
- (b) Objectives of plant breedings 7
3. Write short notes on (any two) : 10
- (a) Mendel's law of dominance
- (b) Klinefelter's syndrome
- (c) Applications of hybridization
- (d) Plant introduction and acclimatization