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**NA—06—2023**

**FACULTY OF SCIENCE AND TECHNOLOGY**  
**B.Sc. (Third Year) (Sixth Semester) EXAMINATION**  
**NOVEMBER/DECEMBER, 2023**  
**(New/CBCS Pattern)**

**BOTANY**

**Paper-XIV**

**(Genetics and Plant Breeding)**

**(Monday, 4-12-2023)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—2 Hours*

*Maximum Marks—40*

*N.B. :—* (1) Attempt *all* questions.

(2) *All* questions carry equal marks.

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

1. What is gene interaction ? Explain complementary gene interaction with suitable example. 15

*Or*

Explain in brief :

(a) Allopolyploidy with reference to *Raphanobrassica*. 8

(b) Turner's syndrome. 7

2. Describe procedure and applications of mutational breeding. 15

*Or*

Describe in brief :

(a) Steps in hybridization. 8

(b) Clonal selection. 7

P.T.O.

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3. Write short notes on (any *two*) :

10

- (a) Dihybrid cross
- (b) Down's syndrome
- (c) Objectives of plant breeding
- (d) G.M.S.

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