

# Bankura University

B. Sc 3rd SEMESTER (Program) EXAMINATIONS, 2021

Subject: BOTANY

Course ID: 31318

Course Code: SPBOT/301/C-1C

Course Title: **Genetics and Plant Breeding**

Full Marks: 25

Time: 1 h 15min

*The figures in the right hand side margin indicate marks.  
Candidates are required to give their answer in their own words  
as far as practicable*

## UNIT-I

**1. Answer any five questions from the following:** **1×5= 5**

- (a) What are alleles?
- (b) What is polyploidy?
- (c) Mention two disadvantages of self pollination.
- (d) What do you mean by incomplete dominance?
- (e) Why emasculation is done in plant breeding?
- (f) What are mutagens?
- (g) What is crossing over?
- (h) What is test cross?

## UNIT-II

**2. Answer any two questions of the following:** **5×2= 10**

- (a) Briefly describe the role of biotechnology in crop improvement.
- (b) What is center of origin of crop plants? Briefly describe about domestication of crop plants.
- (c) Briefly describe about aneuploidy.
- (d) What is acclimatization? Describe the selection process of vegetatively propagated plants in short.

## UNIT-III

**3. Answer any one question from the following:** **10X1=10**

- (a) What are chromosomal aberrations? Describe the process of duplication and translocation with suitable diagram.
- (b) Briefly describe the process of hybridization for cross pollinated plants. Mention two limitations of hybridization.