



**Avinashilingam Institute for Home Science and Higher Education for Women**  
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)  
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC  
Coimbatore - 641 043, Tamil Nadu, India

**Continuous Internal Assessment II – October 2024**  
**SEMESTER - V**

**Class- IIIB.Sc**

**Time :2hrs.Branch - Botany**

**Max. Marks: 60**

**21BBOC14–Plant Breeding and Seed Technology**

**CO1:**Enhance knowledge on plant improvement through breeding aspects

**CO2:**Gain knowledge about selection methods and their application

**CO3:**Demonstrate the different crop improvement methods

**CO4:**Expertized in seed germination and storage technique

**CO5:**Know the seed certification and propagation methods

**Part – A**

**Answer all the questions**

**6 x 1 = 6**

1. Inbreeding increases the frequency of CO1 K1  
(a) Homozygous (b) Heterozygous (c) Genetic diversity (d) Yield
2. Selection of homozygous plants is CO1 K1  
a) Mass selection (b) Pure line selection  
(c) Pedigree (d) Clonal selection
3. Heterosis is known as CO2 K1  
(a) Hybrid Vigor (b) Inbreeding depression  
(c) Outbreeding depression (d) Homozygous
4. Which of the following processes is not related to hybridisation? CO3 K2  
a) Emasculation (b) Selection of parents  
(c) Bagging (d) Crossing or artificial pollination
5. The progeny of nucleus seed is known as CO4 K1  
a) Breeder seed (b) foundation seed  
(c) certified seed (d) registered seed
6. Which is not a type of grafting CO5 K1  
(a) Cleft (b) Saw (c) Bark (d) Bridge

**Part – B**

**Answer all the questions 3x6=18**

7. (a) Write a short note on mass selection. CO2 K2  
Or
7. (b) Give an account of pure line selection. CO2 K2
8. (a) Explain pedigree method. CO3 K2  
Or
8. (b) Enumerate backcross method CO3 K2
9. (a) List out the control measures of seed certification CO5 K2  
Or
9. (b) Give any one value added product from Onion CO5 K2

**Part – C**

**Answer all the questions**

**3x12 =36**

10. (a) Describe the emasculation, bagging, collection of pollens CO2 K2  
Or
10. (b) Give an detail account on Heterosis. CO2 K2
11. (a) Explain the Methods of hybridization in detail. CO3 K2  
Or
11. (b) Explain the Molecular markers assisted plant breeding in detail CO3 K2
12. (a) Differentiate breeder seed and certified seed CO5 K2  
Or
12. (b) Give any one value added product from Potato CO5 K3