**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU -27**

**M.Sc. BOTANY – IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2023**

**(Examination conducted in May 2023)**

**BO 0321: PLANT BREEDING AND PLANT PROPAGATION**

**Time: 2 ½ Hours Max Marks: 70**

Draw diagrams and write examples wherever necessary

This paper contains ONE printed page and THREE parts

**A. Answer any TEN of the following: 10x2=20**

1. NBPGR
2. Apomixis
3. Indian Seed Act
4. Open-pollinated varieties
5. Acclimatization
6. RFLP
7. Gootie
8. Hot beds
9. Aromatic plants
10. Fairchild’s mule
11. Green house
12. Peat moss

**B. Write a critical note on any FIVE of the following: 5x6=30**

1. Back cross technique and its importance
2. Germplasm conservation
3. Genetic basis of heterosis and inbreeding depression (any two theories)
4. Any six garden implements/tools
5. Physiological disorders in Carnation
6. Any three natural vegetative propagules with suitable examples
7. Orchid propagation methods

**C. Give a comprehensive account of any ONE of the following: 2x10=20**

1. a. Characteristics of an ideal marker

b. Molecular Assisted Breeding for disease resistance

1. Barriers in distant hybridization and methods to overcome them.
2. Cultivation, harvest and marketing of apple