PART A

1. Write short notes on any two of the following:-(2\times10=20)
   (a) Bacterial transformation
   (b) Viroids
   (c) Role of microbes in agriculture

2. Write notes on any two of the following:-(2\times10=20)
   (a) Late blight of potato
   (b) Types of fossils
   (c) Aim of plant quarantine system

3. Write an account on any two of the following:-(2\times10=20)
   (a) International Code of Botanical Nomenclature
   (b) Numerical taxonomy
   (c) Binomial nomenclature

4. Describe the general characters on any two of the following families giving floral diagram and
   floral formula:-(2\times10=20)
   (a) Brassicaceae
   (b) Orchidaceae
   (c) Liliaceae
PART B

5. Write notes on any two of the following:  
   (a) Pollen-pistil interaction  
   (b) Tetrasporic type of female gametophyte development  
   (c) Polyembryony and its significance  

6. Write short notes on any two of the following:-  
   (a) Vavilov’s concept of ‘centre of origin of cultivated plants’  
   (b) Importance of Ethnobotany in India  
   (c) Herbaria  

7. Write a note on the following:-  
   (a) Process of Organogenesis in plants  
   (b) Embryo rescue methods  
   (c) Anther culture  
   (d) Cybrids  

8. What do you understand by anomalous secondary growth? Comment on the anomalous secondary structures in the stem of *Bignonia* and *Dracaena.*