

Part B **5 x 6 = 30**
Answer ALL questions
Each answer should not exceed 400 words or two pages

- 11.a. Explain the structure of anther wall. CO1K4
- (or)
- 11.b. Differentiate vegetative and generative cells. CO1K4
- 12.a. Comment on hypostase and epistates CO2K5
- (or)
- 12.b. Give an account on types of ovule. CO2K2
- 13.a. Describe the events involved in pollen- pistil interaction. CO3K3
- (or)
- 13.b. Write a short on pollen germination. CO3K4
- 14.a. Briefly describe embryo development in *Najas lacerate*. CO4K3
- (or)
- 14.b. Explain in detail about parthenogenesis. CO4K2
- 15.a. List out the applications of Plant tissue culture. CO5K5
- (or)
- 15.b. Give an account on protoplast culture. CO6K6

Part C **5 x 12 = 60**
Answer ALL questions
Each answer should not exceed 800 words or four pages

- 16.a. What is tapetum? Enlist types and give details of tapetum. CO1K1
- (or)
- 16.b. Write an essay on microsporogenesis. CO1K1
- 17.a. Describe the organization of female gametophyte. CO2K3
- (or)
- 17.b. Give an illustrated account of the different types of tetrasporic embryo sacs. CO2K2
- 18.a. What is fertilization? Explain in detail about double fertilization. CO3K4
- (or)
- 18.b. Explain in detail about Syngamy and its types. CO3K2
- 19.a. Give an account on the development of Dicot embryo with neat diagrams. CO4K4
- (or)
- 19.b. Explain the structure, types and functions of endosperm. CO4K3
- 20.a. What is another culture? Briefly explain the factors influencing anther culture and its application. CO6K5
- (or)
- 20.b. Write an essay on importance and production of synthetic seeds. CO5K1
