

M.SC.(Botany) Fourth Semester Old
BOT-16.2-PAPER-XVI - Reproductive Biology of Angiosperms (Special)-II

P. Pages : 1

Time : Three Hours



GUG/W/18/2368

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw well labelled diagrams wherever necessary.

1. Explain in-vitro approaches to study fertilization. 16

OR

Write on.

a) Cellular Nature of sperm. 8

b) Role of endosperm in embryo development. 8

2. What is polyembryony? Write about causes of polyembryony and its practical importance.

OR

Write on.

a) Embryo-endosperm relation. 8

b) Ultrastructure and cytology of suspensor cells. 8

3. Define parthenocarpy. Explain its causes and write about the practical importance of parthenocarpy. 16

OR

Write on.

a) Somatic embryogenesis. 8

b) Role of apiary in crop production. 8

4. Explain in detail the methods of protoplast culture. 16

OR

Write on.

a) Cybrids and hybrids. 8

b) Biotransformation. 8

5. Write short notes on.

a) Growth of pollen tube through the style. 4

b) Zygote and its ultra structure. 4

c) Cellular totipotency. 4

d) Bioreactors. 4
