

PSDBOTT11-1 - Paper-XI - DSE-I : Reproductive Biology of Angiosperm-I

P. Pages : 1

GUG/W/22/11244

Time : Three Hours



Max. Marks : 80

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

1. Describe in detail structure of mature anther. Write about anther wall, and its functions. **16**

OR

Write notes on:

- a) Pollen tetrad development. **8**
b) Pollen wall proteins. **8**
2. Describe briefly the development of male gametophyte. Add a note on physiological and biochemical aspects of pollen. **16**

OR

Write notes on:

- a) Structural, developmental and functional aspects of male sterility. **8**
b) Causes for loss of viability. **8**
3. Explain types of embryo sac. Add a note on nutrition of embryo sac. **16**

OR

Write notes on:

- a) Ovule and its structural details. **8**
b) Ultrastructure of synergid, role of central cell and antipodal cell. **8**
4. Define self-incompatibility. Describe different types and mechanism. **16**

OR

Write notes on:

- a) Pollination related floral attractants and Rewards. **8**
b) Pollen pistil interaction. **8**
5. Write short notes on:
- a) Microsporogenesis. **4**
b) Gametocides. **4**
c) Carpel determination. **4**
d) Pollen allelopathy. **4**
