

M.Sc.(Botany) CBCS Pattern Semester-III  
**PSDBOTT11-1 - (DSE-I) Paper-XI : Reproductive Biology of Angiosperm-I**

P. Pages : 1

Time : Three Hours



**GUG/W/23/11244**

Max. Marks : 80

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

1. What is anther? Describe the internal structure of anther. 16

**OR**

Write notes on:

- a) Pollen tetrad development. 8
- b) Need of reproductive system as experimental material. 8

2. Explain gene expression during pollen development. 16

**OR**

Write notes on-

- a) Pollen abortion. 8
- b) Development of male gametophyte. 8

3. What is ovule? Describe orthotropous ovule in detail. 16

**OR**

Write notes on:

- a) Female gametophyte. 8
- b) Development of Megaspore. 8

4. Describe the mechanism of incompatibility and write notes on its significance. 16

**OR**

Write notes on:

- a) Bio-chemistry of pollen germination. 8
- b) Stigma structure and types. 8

5. Write short notes on:

- a) Microsporogenesis. 4
- b) Gametocides. 4
- c) Haustoria. 4
- d) Parasexual hybridization. 4

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