

4/BOT-252(Th) Syllabus-2023

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(May-June)

FYUP : 4th Semester Examination

BOTANY

(Reproductive Biology of Angiosperms)

(BOT-252)

(Theory)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer Question No. **1** which is compulsory and **four**
from the rest, selecting **one** from each Section

1. Write short notes on the following : $4 \times 4 = 16$

- (a) Pollenkitt
- (b) Suspensor and its functions
- (c) Structure of dicot exalbuminous seed
- (d) Cellular endosperm haustoria

(2)

SECTION—I

2. Write notes on the following : $5 \times 2 = 10$
- (a) Microgametogenesis
- (b) Formation of different wall layers of microsporangium
3. Give an illustrated account of tetrasporic types of female gametophyte. 10

SECTION—II

4. What is self-incompatibility? State its biological significance and discuss the genetic basis of self-incompatibility in SSI system. $2+2+6=10$
5. What is embryogeny? Give an account of the development of a typical dicot embryo. $1+9=10$

SECTION—III

6. Comment on the following : $5 \times 2 = 10$
- (a) Classification of seeds
- (b) Management of pollen allergy
7. Write an account on apomixis and its importance in crop improvement. $8+2=10$

(3)

SECTION—IV

8. What is an endosperm? With suitable diagrams, describe the development and structure of different types of endosperm. $2+4+4=10$
9. Write notes on the following : $5 \times 2 = 10$
- (a) Structure and functions of synergids
- (b) Polyembryony

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