B.Sc. CBCS Pattern Semester-III

012A - Botany Paper-I : Reproductive Biology of Angiosperms, Plant Growth and Development

P. Pages : 2 **GUG/W/23/11598**

Time : Three Hours * 6 5 7 9 * Max. Marks : 50

Notes : 1. All questions are compulsory & carry equal marks.
2. Draw well labelled diagram wherever necessary.

1. Write notes on.

a) Contrivances of cross pollination. **5**

b) Describe the different types of ovules. **5**

OR

Write short notes on.

c) Male gametophyte. **2½**

d) Tetrasporic embryo sac. **2½**

e) T.S. of Anther (Diagram only). **2½**

f) Autogamy. **2½**

2. Write notes on.

a) Ecological adaptation of seed. **5**

b) Development of dicot embryo (Onagrad type). **5**

OR

Write short notes on.

c) Nuclear type of endosperm. **2½**

d) Causes of seed dormancy. **2½**

e) Dispersal of seeds by wind. **2½**

f) Double fertilization and triple fusion. **2½**

3. Write notes on.

a) Tropic movement. **5**

b) Growth curves. **5**

OR

Write short notes on.

c) Auxin. **2½**

d) Seismonasty. **2½**

e) Gibberellins. **2½**

f) Significance of Ethylene. **2½**

4. Write notes on.

a) Phytochromes. **5**

b) Photoperiodism. **5**

OR

Write short notes on.

c) Concept of florigen. **2½**

d) Vernalization. **2½**

e) Circadian rhythm. **2½**

f) Abscission. **2½**

5. Write answer in two or three lines only **any ten.** **10**

a) Tapetum. b) Synergids.

c) Ornithophily. d) Oospore.

e) Zoochory. f) Pappus.

g) ABA. h) Parthenocarpy.

i) Dedifferentiation. j) PCD.

k) Senescence. l) Day neutral plant.

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