

B.Sc. - II (CBCS Pattern) Sem-III
**012A - Botany Paper-I (Reproductive Biology of Angiosperms,
Plant Growth & Development)**

P. Pages : 2

Time : Three Hours



GUG/W/23/11598 (S)

Max. Marks : 50

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw well labelled diagram wherever necessary.
 3. Illustrate your answer with suitable examples.

1. Write on-

- | | |
|--|---|
| a) Internal structure of mature Anther. | 5 |
| b) Define pollination? Write on contrivances of cross pollination. | 5 |

OR

Write short notes on-

- | | |
|---|----|
| c) Anatropous ovule (only diagram) | 2½ |
| d) Rewards for pollinators. | 2½ |
| e) Structure of Pistil. | 2½ |
| f) Structure of polygonum type of Embryo sac. | 2½ |

2. Write on-

- | | |
|--|---|
| a) Seed dormancy & its causes. | 5 |
| b) Onograd Type of Embryo development. | 5 |

OR

Write short notes on-

- | | |
|--|----|
| c) Cellular endosperm. | 2½ |
| d) Ecological adaptation of seed. | 2½ |
| e) Anemochory. | 2½ |
| f) Double fertilization & Triple fusion. | 2½ |

3. Write on-

- | | |
|------------------------------|---|
| a) Role of Auxin. | 5 |
| b) Nastic movement in plant. | 5 |

OR

Write short notes on-

- c) Hydrotropism. 2½
- d) Phototropism. 2½
- e) Role of Gibberellin. 2½
- f) Role of ABA. 2½

4. Write on-

- a) Photoperiodism. 5
- b) Senescence. 5

OR

Write short notes on-

- c) Phytochrome. 2½
- d) Biological clock. 2½
- e) Florigen. 2½
- f) Vernalization. 2½

5. Write on the following in one-two lines only (Diagrams are not necessary) (**any ten**). **10**

- a) Microsporogenesis
- b) Homogamy
- c) Funicle
- d) Helobial endosperm
- e) Scarification
- f) Endospermic seed
- g) Ethylene
- h) Chemotropism
- i) Backnae disease
- j) LDP
- k) Abscission layer
- l) Devernalization
