

Bachelor of Science (B.Sc.) (CBCS Pattern) Third Semester
**Botany Paper-I (Reproductive Biology of Angiosperms,
Plant Growth and Development)**

P. Pages : 2

Time : Three Hours



GUG/W/18/11598

Max. Marks : 50

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

1. Write on :-

- | | |
|--|---|
| a) Contrivances for cross pollination. | 5 |
| b) Structure of Orthotropous ovule. | 5 |

OR

Write short notes on :-

- | | |
|--|----|
| c) Structure of polygonum type female gametophyte. | 2½ |
| d) Bisporic embryo sac. | 2½ |
| e) Structure of pollen grain. | 2½ |
| f) Cleistogamy. | 2½ |

2. Write on :-

- | | |
|--|---|
| a) Double fertilization and Triple fusion. | 5 |
| b) Causes of seed Dormancy. | 5 |

OR

Write short notes on :-

- | | |
|------------------------------------|----|
| c) Zoochory | 2½ |
| d) Free Nuclear endosperm. | 2½ |
| e) Onagrad type embryo. | 2½ |
| f) Ecological adaptations of seed. | 2½ |

3. Write on :-

- | | |
|----------------------|---|
| a) Role of Auxin. | 5 |
| b) Phases of Growth. | 5 |

OR

Write short notes on :-

- | | |
|---------------------------|----|
| c) Role of Gibberellin. | 2½ |
| d) Seismonastic movement. | 2½ |
| e) Absciscic acid. | 2½ |
| f) Phototropism. | 2½ |

4. Write on :-

- | | |
|-----------------------------------|---|
| a) Senescence and Abcission. | 5 |
| b) Short day and long day plants. | 5 |

OR

Write short notes on :-

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

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

- | | |
|---|--|
| a) Self pollination (Defination). | b) Anatropous ovule (Def ⁿ). |
| c) Tetra sporic Embryo sac. (Def ⁿ) | d) Haustorium. |
| e) Stratification. | f) Porogamy. |
| g) Ethylene. | h) Thigmotropism. |
| i) Cytokinin. | j) Photoperiodism. |
| k) Day neutral plants. | l) Vernalin |
