

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

P. Pages : 2

Time : Three Hours



GUG/S/25/11598

Max. Marks : 50

1. Write notes on

- | | |
|--|---|
| a) Attraction and Rewards for pollination. | 5 |
| b) Type of ovules | 5 |

OR

Write short note on

- | | |
|--|----|
| c) Polygonum type of embryo sac (diagram only) | 2½ |
| d) Structure of pollen grain. | 2½ |
| e) Heterostyly | 2½ |
| f) Structure of pistil. | 2½ |

2. Write notes on

- | | |
|-------------------------------|---|
| a) Double fertilization. | 5 |
| b) Seed dispersal strategies. | 5 |

OR

Write short note on

- | | |
|--|----|
| c) Methods to break seed dormancy. | 2½ |
| d) Cellular type of endosperm. | 2½ |
| e) Onagrad type of embryo (diagram only) | 2½ |
| f) Ecological adaptation of seed | 2½ |

3. Write notes on

- | | |
|----------------------------------|---|
| a) Plast growth regulator Auxin. | 5 |
| b) Nastic movements in Plants. | 5 |

OR

Write short notes on

- | | |
|--------------------------------|----|
| c) Gibberellin | 2½ |
| d) Phototropism. | 2½ |
| e) Stages of phases of Growth. | 2½ |
| f) Ethylene | 2½ |

4. Write notes on

- | | |
|-------------------|---|
| a) Phytochromes | 5 |
| b) Photoperiodism | 5 |

OR

Write short notes on

- | | |
|-----------------------------------|----|
| c) Circadian rhythm | 2½ |
| d) General account of senescence. | 2½ |
| e) Vernalization. | 2½ |
| f) Abscission. | 2½ |

5. Write answers in two to three lines **any ten.** **10**

- | | |
|------------------------|------------------------|
| a) Tapetum | b) Micropyle |
| c) Chiropterophily | d) PEN |
| e) Suspended animation | f) Zoochory |
| g) ABA | h) Hydrotropism |
| i) Morphogenesis | j) Florigen |
| k) Abscission layer | l) Day-Neutral plants. |
