



TKN/KS/16/5919

Bachelor of Science (B.Sc.) (Botany) Semester-VI
(C.B.S.) Examination
PLANT PHYSIOLOGY-II AND BIOTECHNOLOGY
Paper—1

Time—Three Hours]

[Maximum Marks—50

- N.B. :—** (1) All questions are compulsory and carry equal marks.
(2) Illustrate your answers with suitable examples and diagrams wherever necessary.

1. Write on :

- | | |
|-------------------------------|---|
| (a) Tropic Movement in Plants | 5 |
| (b) Role of Auxins. | 5 |

OR

Write short notes on :

- | | |
|-------------------------|-----|
| (c) Phases of growth | 2.5 |
| (d) Pr Phytochrome | 2.5 |
| (e) Biological clock | 2.5 |
| (f) Role of Cytokinins. | 2.5 |

2. Write on :

- | | |
|------------------------------------|---|
| (a) Methods to break seed dormancy | 5 |
| (b) Senescence. | 5 |

OR

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Contd.

Write short notes on :

- | | |
|-----------------------------|-----|
| (c) Long day plants | 2.5 |
| (d) Hypersensitive response | 2.5 |
| (e) Vernalization | 2.5 |
| (f) Role of florigen. | 2.5 |

3. Write on : 5
- | | |
|------------------------|---|
| (a) Culture media | 5 |
| (b) Cybrid production. | |

OR

Write short notes on :

- | | |
|-----------------------------|-----|
| (c) Cell suspension culture | 2.5 |
| (d) Dry heat sterilization | 2.5 |
| (e) Protoplast culture | 2.5 |
| (f) Anther culture. | 2.5 |

4. Write on : 5
- | | |
|------------------------------|---|
| (a) CDNA library | 5 |
| (b) Structure of Ti-Plasmid. | 5 |

OR

Write short notes on :

- | | |
|-------------------------------------|-----|
| (c) Restriction enzymes | 2.5 |
| (d) Advantages of transgenic plants | 2.5 |
| (e) Ligases | 2.5 |
| (f) Plasmid as cloning vector. | 2.5 |



5. Write in two or three lines only (any ten). Diagrams are not necessary :-

- NAGPURSTUDY
- (a) Epinasty
 - (b) ABA
 - (c) Pfr
 - (d) Abscission
 - (e) Secondary metabolites
 - (f) Short day plants
 - (g) Explant
 - (h) Aseptic culture
 - (i) Micropropagation
 - (j) DNA polymerase
 - (k) Recombinant DNA
 - (l) Expression vector.

1×10