

Google



Next Semester के Latest Papers सबसे
पहले Download करने के लिए आप हमें
Contact भी कर सकते हैं

Whatsapp No : 8076723805

Email : dm8076723805@gmail.com

9. (a) Write in detail about photo periodism. 8
(b) Discuss the physiological roles and importance of cytokinins. 8

Roll No.

Exam Code : J-21

Subject Code—53417

B. Sc. EXAMINATION

(Batch 2018 Onwards)

(Main & Re-appear)

(Fourth Semester)

BOTANY

BOT-401-L Paper X

Plant Physiology

Time : 3 Hours

Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks. Draw diagrams wherever required.

1. Define the following terms : **2×8=16**

- (a) DPD
(b) Plasmolysis
(c) Macronutrients and Micronutrients

J-53417

4

—

(1-12-4-0821) J-53417

P.T.O.

- (d) Transpiration
- (e) Source and Sink
- (f) Etiolation
- (g) Phytochrome
- (h) Apical Dominance.

Unit I

- 2. (a) What do you mean by Water Potential ?
Discuss its various components. **8**
- (b) Write short notes on the following : **8**
 - (i) Osmosis
 - (ii) Guttation.
- 3. (a) Discuss Steward's 'Starch-Sugar Hypothesis' for stomatal movement. **8**
- (b) Discuss the factors affecting the rate of transpiration. **8**

Unit II

- 4. (a) Discuss the Physiological role and deficiency symptoms of phosphorus and potassium in plants. **8**
- (b) Write the differences between active and passive uptake of ions. **8**

J-53417

2

- 5. (a) Discuss the Carrier Concept' of ion uptake in plant cells. **10**
- (b) Write short notes on the following :**3+3**
 - (i) Hydroponics
 - (ii) Criteria of essentiality of an element.

Unit III

- 6. (a) In light of Munch's Mass Flow Hypothesis, describe the source-sink relationship during transport of organic substances. **10**
- (b) Describe the factors affecting translocation of organic solutes. **6**
- 7. (a) Write notes on the following : **6+2**
 - (i) Girdling Experiment
 - (ii) Composition of Phloem.
- (b) Discuss the process of phloem loading and unloading. **8**

Unit IV

- 8. (a) How were gibberellins discovered ?
Discuss their physiological roles. **12**
- (b) Write a short note on Vernalization. **4**

(1-12-5-0821) J-53417

3

P.T.O.