

SEM	SET	PAPER CODE	TITLE OF THE PAPER
VI	2012	11UBO630214	PLANT PHYSIOLOGY

SECTION – A**Answer all the questions:****20 x 1 = 20****Choose the correct answer:**

- The molecular bond angle of water is _____.
 - 102°
 - 105°
 - 108°
 - 109°
- _____ is a micronutrient.
 - calcium
 - magnesium
 - boron
 - sulphur
- Which of the following is a C4 plant
 - sugarcane
 - wheat
 - rice
 - potato
- Krebs cycle is also known as?
 - Calvin cycle
 - TCA cycle
 - Glycolysis
 - Hills reaction
- Which among the following is a growth inhibitor?
 - IAA
 - GA
 - 2,4–D
 - ABA

Fill in the blanks:

6. Dewdrops on leaves are due to _____.
7. Conversion of nitrite to nitrate is done by _____ enzyme.
8. The sites for photosynthesis is found in _____.
9. FAD is a _____.
10. _____ hormone helps lateral buds to grow.

State True or False:

11. Decrease in turgor pressure in guard cell opens the stomata.
12. EDTA is a chelating agent.
13. Conversion of glucose into pyruvic acid is krebs cycle.
14. ATP contains 2 high energy bonds.
15. 2,4-D is a natural hormone.

Answer in one or two sentences:

16. What constitutes the stomatal complex?
17. What is Hydroponics?
18. Name some of the accessory pigments?
19. What is respiratory quotient?
20. What are day neutral plants? Give two examples.

SECTION – B

Answer all the questions:

5 x 4 = 20

21. a. Explain the types of water flow through the root system of a plant.

OR

- b. Explain the mechanism of absorption of water in plants.
22. a. Explain the deficiency in mineral nutrients of carbon compounds.

OR

- b. With neat diagram explain the nitrogen cycle.
23. a. With illustrations write short notes on photosynthetic electron transport system.

OR

- b. Explain the process of chemosynthesis and its significance.
24. a. Write the significance of Pentose phosphate pathway.

OR

- b. Differentiate photosynthesis from respiration.
25. a. Explain different phases of growth with sigmoid curve.

OR

- b. Write short notes on Vernalization.

SECTION – C

Answer any FOUR questions:

4 x 15 = 60

26. Explain in detail the types, mechanism and factors affecting transpiration.
27. With suitable diagrams, explain in detail the processes of biological nitrogen fixation in plants.
28. With suitable diagrams explain dark reaction of photosynthesis.
29. With illustrations, write a detailed account on glycolysis.
30. Explain in detail, the physiological effects of different plant growth regulators.
