



K16U 0572

Reg. No. :

Name :

IV Semester B.Sc. Degree (CBCSS-2014 Admn. Regular)
Examination, May 2016
COMPLEMENTARY COURSE IN BOTANY/PLANT SCIENCE
4C04 BOT/PLS : Angiosperms – Anatomy and Physiology

Time : 3 Hours

Total Marks : 32

SECTION – A

(Answer all)

I. Choose the correct answer.

1) The pit aperture is closed by

- a) Tyloses b) Lignin c) Torus d) Cutin

2) An antitranspirant

- a) Indole Acetic acid b) ABA
c) Gibberellins d) Kinins

3) Dermatogen gives rise to

- a) Xylem b) Pith c) Epidermis d) Cortex

4) Element involved in stomatal mechanism

- a) Magnesium b) Potassium
c) Phosphorus d) Calcium

5) N fixing enzyme

- a) Nitrate reductase b) Urease
c) Nitrogenase d) Amino transferase

(5x1=5)

P.T.O.



SECTION – B

(Answer any four)

- 6) With the help of diagrams explain the different types of sclereids.
- 7) Explain imbibition with suitable examples.
- 8) Distinguish between the anatomy of the dicot root and monocot root.
- 9) Write about the process of loss of water in the liquid form from plants.
- 10) What is phloem loading ?
- 11) Discuss the relationship between OP, TP, WP and DPD in movement of water across cells. (4×2=8)

SECTION – C

(Answer any three)

- 12) Give an account on the various types of photosynthetic pigments.
- 13) Write what you know about phytochrome and its role in the process of flowering.
- 14) Comment on Sigmoid curve and the phases of growth.
- 15) Explain the structure and formation of the periderm with the aid of diagrams.
- 16) Write on the mechanism involved in the photosynthesis of succulents. (3×3=9)

SECTION – D

(Answer any two)

- 17) Explain how water reaches the top of very tall plants.
 - 18) What are major and trace elements, name them and give the role of six major elements found in plants ?
 - 19) Describe the role of different types of hormones in the growth and development of plants.
 - 20) Write in detail on the ergastic substances found in plants. (2×5=10)
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