



K19U 0559

Reg. No. :

Name :

**IV Semester B.Sc. Degree (CBCSS – Reg./Supp./Imp.)
Examination, April 2019
(2014 Admission Onwards)
COMPLEMENTARY COURSE IN BOTANY/PLANT SCIENCE
4C04 BOT/PLS : Angiosperms – Anatomy and Physiology**

Time : 3 Hours

Total Marks : 32

SECTION – A

Answer **all**.

Choose the correct answer.

1. Of these, which is the antitranspirant ?
a) Tryptophan b) Magnesium c) Abscissic acid d) Lecithin
2. Which of these enters into the composition of nucleic acid ?
a) Boron b) Copper c) Sulphur d) Phosphorus
3. The pit aperture is closed by
a) Tyloses b) Lignin c) Torus d) Cutin
4. Phytochrome is involved in
a) Vernalisation b) Dormancy c) Phototropism d) Photoperiodism
5. Periblem gives rise to
a) Xylem b) Pith c) Epidermis d) Cortex **(5×1=5)**

SECTION – B

Answer **any four** :

6. Distinguish between CAM and C4 plants.
7. What is phloem loading ? How does it differ from phloem unloading ?

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8. Explain bulliform cells.
9. Write notes on different types of collenchyma.
10. Explain senescence, mention the different types.
11. Write on the Histogen theory. (4×2=8)

SECTION – C

Answer any three :

12. Comment on the phases of growth.
13. Write on the process of guttation. How does it differ from transpiration ?
14. With the help of a diagram explain the structure of the dorsiventral leaf.
15. What is meant by asymbiotic N fixation ? Explain.
16. What is meant by solution culture experiments ? Explain its application. (3×3=9)

SECTION – D

Answer any two :

17. Write in detail on the ergastic substances found in plants.
18. Write about the various theories of the mechanism of water uptake.
19. What are the major and trace elements, name them and give the role of six major elements found in plants.
20. What are Growth Regulators ? Explain the role Gibberellins in the growth of the plant. (2×5=10)