Reg. No. : .....

Name : .....

K19U 3307

I Semester B.Sc. Degree CBCSS(OBE)-Regular Examination, November - 2019

(2019 Admission)

CORE COURSE IN BOTANY/PLANT SCIENCE

IB01BOT/PLS : CYTOLOGY AND ANGIOSPERM ANATOMY

Time : 3 Hours Max. Marks : 40

Draw diagrams wherever specified.

PART - A

Objective type questions. Answer **All**. **(4x1=4)**

1. The Plastid meant for the storage of
   a) Chromoplast b) Elaioplast
   c) Amyloplast d) Aleuroplast
2. Which one of the tissue is the living mechanical tissue
   a) Parenchyma b) Collenchyma
   c) Sclerenchyma d) All the above
3. Companion cells are usually associated with
   a) Fibres b) Tracheids
   c) Vessels d) Sieve tubes
4. The base of the Oxysome is also called
   a) F_1 Particle b) F_5 Particle
   c) F_o Particle d) F_6 Particle

P.T.O.

PART - B

Short Essay Questions. Answer any **Eight**. **(8×2=16)**

5. What are hydathodes? What are the functions?
6. Differentiate between heart wood and sap wood.
7. What are pits? How are they classified?
8. Identify any two applications of plant anatomy.
9. Give an account of Nodal anatomy.
10. Explain the ultra-structure of Cell wall.
11. What are Bulliform cells? Explain its significance.
12. Explain the structure of Lenticel.
13. What are tyloses and explain with suitable diagram.
14. Briefly explain about Chromatin reticulum.
15. Draw the structure of Mitochondria.
16. Explain the structure and function of Vacuoles.

PART - C

Essay questions. Answer any **Four**. **(4×3=12)**

17. What are secretory tissues? How they are classified.
18. With the help of diagram explain the structure of dicot leaf.
19. Write notes on different kinds of vascular arrangements.

20. Explain the structure of Ribosomes.
21. Distinguish between prokaryotic and eukaryotic chromosomes.
22. With the help of diagrams explain the types of stomata.

PART - D

Long Essay Questions. Answer any **One**. **(1×8=8)**

23. Write an essay on the ultra-structure of interphase nucleus and its significance.
24. Compare the anomalous anatomical structure of Boerhaavia stem with Dracaena stem.
25. Write an essay on secondary structure of dicot stem with suitable diagrams.