D 13272 **(Pages : 2)** **Name.....**

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Botany

BO 01 CT 03 – ANGIOSPERM ANATOMY, ANGIOSPERM EMBRYOLOGY, PALYNOLOGY AND LAB TECHNIQUES

Time : Three Hours Maximum : 36 Weightage

I. Answer the questions very briefly :

1. Write a note on trilacunar node.
2. Comment on interxylary phloem.
3. Write a critical note on spring and autumn wood.
4. What are the functions of plasmodesmata?
5. Describe the stomata of monocot leaf.
6. Write an account of adventive polyembryony.
7. Differentiate pro-ubisch bodies, prime exine and the foot layer.
8. What is polyspermy?
9. Write a note on nutritional and medicinal value of honey.
10. Distinguish between Endothecium and Endothelium.
11. What is sporopollenin?
12. Comment on cellular endosperm.
13. Write a short note on. NPC system.
14. What is PAS test? What is its use?

(14 x **1** = 14 weightage)

II. Answer any *seven* questions in not more than 100 words :

15. Briefly discuss the role of anatomy in relation to taxonomy.
16. Give an account of anatomical features of angiosperm wood:
17. Briefly discuss the anomalous secondary growth in beet root.
18. Write a note on the anatomy of seedling root.
19. What are the functions of tapetum?

Turn over

20. Elucidate the structure and function of suspensor.
21. Briefly describe the development of monosporic embryosacs found in angiosperms.
22. Discuss briefly the various embryological characters useful in identifying taxonomic positions.
23. How is the knowledge of Palynology helpful to mankind?
24. Explain the techniques involved in whole mount preparation.

(7 x 2 = 14 weightage)

III. Answer any *two* questions in not more than 300 words :

25. Give a detailed account on the position, structure and activity of cambium in dicots.
26. Describe the structure and development of monocotyledonous embryo.
27. Write an account of Anther culture and its applications.
28. Give an account of classification of stains and write a note on the composition and use of important stains.

(2 x 4 = 8 weightage)