

Reg. No

Name

18P221

M Sc DEGREE END SEMESTER EXAMINATION - APRIL 2018**SEMESTER 2 : BOTANY****COURSE : 16P2BOTT06 ; PLANT ANATOMY, PRINCIPLES OF ANGIOSPERM SYSTEMATIC & MORPHOLOGY****(Common for Regular - 2017 Admission & Supplementary - 2016 Admission)**

Time : Three Hours

Max. Marks: 75

Section A**Answer any 8 (2 marks each)**

1. How do you differentiate a salt gland from other secretory glands?
2. What are lenticels? What is its function?
3. What are annual rings? What is its significance?
4. What do you mean by trilacunar node?
5. Explain anatomy of a follicle.
6. What are the different types of roots in epiphytes?
7. Explain the mode of seed dispersal in halophytes.
8. Explain histotaxonomy.
9. What are the major and minor categories in taxonomic hierarchies?
10. Explain briefly about author citation in plant nomenclature.
11. Write briefly on the role of cytological characters in Taxonomy.
12. What is DNA barcoding?

(2 x 8 = 16)**Section B****Answer any 7 (5 marks each)**

13. What is PTM? Write a note on its development.
14. Briefly explain the structure of various types of trichomes based on their morphology.
15. How will you evaluate the strength of wood in relation to its structure?
16. What are the characteristics of periderm?
17. Write a brief history of ICBN.
18. Write an account on modern multi-disciplinary approaches to Taxonomy.
19. Classify flowers based on the position of ovary. Give examples.
20. Explain various types of aestivation in calyx and corolla.
21. Explain the functions of essential and non-essential parts of a typical angiosperm flower.
22. Give an account on various types of stamens and staminal fusion.

(5 x 7 = 35)**Section C****Answer any 2 (12 marks each)**

23. What are laticifers? Explain the structure of bark and distribution pattern of laticifers in Rubber plant.

OR

24. How do you distinguish dicot wood from gymnosperm wood based on anatomical features?

25. Write an essay on chemotaxonomy and DNA barcoding as modern tools in angiosperm systematics.

OR

26. Write an essay on the classification of fruits. Draw diagrams and provide suitable examples for each type.

(12 x 2 = 24)