Reg. No……. Name…… **20U439**

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2020

SEMESTER **– 4: BOTANY (COMPLEMENTARY COURSE FOR ZOOLOGY)**

COURSE: **15U4CPBOT4, ANATOMY AND APPLIED BOTANY**

(For Regular - 2018 Admission and Supplementary / Improvement 2017, 2016, 2015 Admissions)

Time: Three Hours Max. Marks: 60

PART A

I. *Answer **All** questions; each question carries **1** mark.*

1. What are lysosomes?
2. Where is velamen tissue found?
3. What is acclimatization?
4. What are raphides?
5. Where are bulliform cells found? What is its function?
6. What are hydathodes?
7. Explain parthenocarpy.
8. What are artificial seeds? (1 x 8 = 8)

PART B

II. *Answer **ANY SIX** questions; each question carries **2** marks.*

9. Distinguish between a simple pit and a bordered pit.
10. What is mutation breeding?
11. Write a note on collenchyma.
12. What is the significance of digestive glands in plants? Give an example.
13. Explain 'T' budding.
14. Differentiate between ring porous and diffuse porous wood.
15. What is vivipary? Give an example for vivipary in plants.
16. What is periderm?
17. What is plasmodesmata? What is its function?
18. What is asepsis? (2 x 6 = 12)

PART C

III. *Answer **ANY FOUR** questions; each question carries **4** marks.*

19. Briefly describe anatomy of dicot leaf.
20. Explain the primary structure of a monocot stem.
21. Explain the steps involved in hybridization.

22. Write a note on layering technique and explain the different types of layering.
23. What are the morphological adaptations found in Vanda?
24. Give the structure and functions of any two living inclusions in plant cells. (4 x 4 = 16)

PART D

IV. *Answer **ANY TWO** questions; each question carries **12** marks.*

25. What are complex tissues? Explain with diagrams the different types of complex tissues in plants.

OR

26. Describe with diagrams the normal secondary thickening in dicot stems.

27. Explain the techniques involved in tissue culture and add a note on its applications.

OR

28. Give an account on the morphological and anatomical adaptations in *Nymphaea*.

(12 x 2 = 24)

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