Reg. No ..... Name **21U445**

B Sc DEGREE END SEMESTER EXAMINATION - JULY 2021

SEMESTER 4 : COMPLEMENTARY BOTANY FOR B Sc ZOOLOGY

COURSE : **19U4CPBOT4 : ANATOMY AND APPLIED BOTANY**

(For Regular - 2019 Admission)

Time : Three Hours Max. Marks: 60

PART A

Answer All (1 mark each)

1. What is a Lysigenous cavity? Provide example.
2. Write any two functions of xylem parenchyma.
3. Write any two major characteristics of vascular bundles in dicot stem
4. What is inter-fascicular cambium?
5. What is vivipary?
6. Name the male reproductive organ in angiosperms.
7. What is quarantine?
8. Name any two Micronutrients used in tissue culture media.

(1 x 8 = 8)

PART B

Answer any 6 (2 marks each)

9. Differentiate amphicribal and amphivasal vascular bundles.
10. Differentiate storied and non storied cambium.
11. Differentiate heart wood and sapwood.
12. Explain any two adaptations of leaves in xerophytes.
13. List out achievements of mass selection.
14. Compare spontaneous and induced mutations.
15. What are different types of layering?
16. Explain organic nutrients used in tissue culture medium.

(2 x 6 = 12)

PART C

Answer any 4 (5 marks each)

17. With the help of suitable diagrams briefly explain the ultra structure of plant cell wall.
18. Explain the role of cambium in wound healing and budding.
19. Explain salient anatomical features of a dicot stem.
20. Discuss the characteristic features of apomixis.
21. Discuss the method of grafting in plants.
22. Distinguish organogenesis and somatic embryogenesis in plant tissue culture.

(5 x 4 = 20)

PART D

Answer any 2 (10 marks each)

23. Write an essay on the anomalous secondary thickening in Bignonia with the help of suitable labelled diagrams.

OR

24. With the help of suitable labelled diagrams write a comparative account of the anatomy of dicot and monocot leaf.

25. Discuss the significance, procedure, merits and demerits of plant introduction. Add a note on its achievements.

OR

26. "Polyploidy breeding is a special method of plant breeding". Discuss it.

(10 x 2 = 20)