Reg. No…….. Name…… **18U439**

B. Sc. DEGREE END SEMESTER EXAMINATION MARCH 2018

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

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

Common for Regular (2016 Admission) & Supplementary (2015 Admission)

Time: Three Hours Max. Marks: 60

PART A

Answer ***all*** questions. Each question carries ***1*** mark.

1. What is Asepsis?
2. What is *Raphano brassica*? What is its significance?
3. What is Apospory?
4. What is Organogenesis?
5. What are Leucoplasts?
6. What are Cystoliths?
7. 'There is apparently an actual union of cambia of two plants during grafting'. Why is it said so?
8. What is dendrochronology? (1 x 8 = 8)

PART B

Answer ***any six*** questions. Each question carries ***2*** marks.

9. With the help of diagrams bring out the difference between Simple pit pair and Bordered pit pair.
10. Differentiate between Perforation plate and Sieve plate.
11. Bring out the differences between Dicot stem and Monocot stem.
12. Differentiate between Fusiform initials and Ray initials.
13. What are Knots? Mention the two important types of knots..
14. Write a brief account on Vivipary.
15. Name any two plant breeding research centres in Kerala.
16. Write a note on the merits and demerits of Plant introduction.
17. Differentiate between Parthenocarpy and Parthenogenesis.
18. What is Anther culture? What is its significance? (2 x 6 = 12)

PART C

Answer ***any four*** questions. Each question carries ***4*** marks.

19. Give an account on the Quarantine measures followed in India.
20. Explain any four non-nitrogenous waste products found in plants.
21. Differentiate between articulated and non-articulated laticifers.
22. With the help of diagrams bring out the anatomical adaptations of roots of *Vanda*.
23. Differentiate between diffuse porous and ring porous wood.
24. What is pureline selection? Explain the procedure. (4 x 4 = 16)

PART D

Answer ***any two*** questions. Each question carries ***12*** marks.

25. Explain the layers of cell wall. Give a brief account of microscopic and submicroscopic structure of cell wall.
26. With the help of neat labeled diagrams bring out the differences between dicot leaf and monocot leaf.
27. Define Hybridization. Explain the procedure of Hybridization.
28. Explain the procedure of Polyploidy breeding. Bring out the merits of Polyploidy breeding.

(12 x 2 = 24)

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