**P – 7731**

Reg. No. : .............................

Name : ................................

## First Semester B.Sc. Degree Examination, March 2023

### First Degree Programme under CBCSS

### Botany

### Core Course – I

### BO 1141 – ANGIOSPERM ANATOMY, REPRODUCTIVE BOTANY AND PALYNOLOGY

### (2022 Admission)

Time : 3 Hours

Max. Marks : 80

### SECTION – A

Answer **all** questions in **1** or **2** sentences. Each question carries **1** mark.

Write short notes on :

1. Simple pits

2. Resins

3. Anisocytic

4. Glandular tissue

5. Eccentric starch grains

6. Sap wood

7. Bast fibers

8. Cystolith

9. Interfascicularcambium

10. Intine.

<div align="right">(10 × 1 = 10 Marks)</div>

## SECTION – B

Answer **any eight** of the following. Each question carries **2** marks.

11. Comment on composition of plasma membrane.

12. Name a few excretory products in plants.

13. Give a brief account on essential oils in plants.

14. Describe the organization of root apex.

15. Write the functions of stomata.

16. Write an account on epidermis.

17. Comment on diffuse porous wood.

18. Explain the function of lenticels in plants.

19. What are Raphides?

20. Comment on anther wall layers.

21. What is the function of synergids?

22. Enumerate on Apical cell theory.

<div align="right">(8 × 2 = 16 Marks)</div>

## SECTION – C

Answer **any six** of the following questions. Each question carries **4** marks.

23. Give an account of laticifers.

24. Comment on the structure of graminaceous stomata.

25. Explain the anatomy of adicot leaf.

26. Differentiate between hardwood and softwood.

27. Comment on sporogenous tissue of anther.

28. Briefly explain the dehiscence of an anther.

29. With a neat diagram explain an orthotropusovule.

30. Write short notes on barriers of fertilization.

31. Comment on nuclear type of endosperm.

**(6 × 4 = 24 Marks)**

## SECTION – D

Write an essay on **any two** of the following. Each question carries **15** marks.

32. What are permanent tissues? Explain the different types of permanent tissues in plants.

33. Describe the anomalous secondary growth in *Boerhaavia*.

34. Explain embryosac formation in occurring in *Adoxa*.

35. Give an account with sketches on the structure and development of dicotembryo.

**(2 × 15 = 30 Marks)**

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