

BA, BSc, BCOM DEGREE END SEMESTER EXAMINATION - NOVEMBER 2025**UGP (HONS.) SEMESTER - 1: DISCIPLINE SPECIFIC COURSE (BOTANY)****COURSE: 24UBOTDSC101: PLANT SCIENCE AND ITS ADVANCEMENTS***(For Regular 2025 & Improvement/Supplementary 2024 Admission)*

Time: 1.5 Hours

Max. Marks: 50

PART A***Answer in one word, each question carries 1 mark.******Maximum of 10 marks can be scored***

1. What is thallus? (R, CO 2)
2. What is triple fusion? (R, CO 2)
3. Name the instrument used for preparing thin sections. (A, CO 3)
4. Which crop plant is commonly called as "Grain of life"? (R, CO 1)
5. What is phytoremediation? (R, CO 1)
6. Expand IoT. (R, CO 3, CO 5)
7. Which scientist is known as "woman who sweetened India's sugar cane"? (R, CO 1)
8. Preservation of the structural and cellular elements of the plant tissue as close to their original state as possible is known as (U, CO 3)
9. Expand TEM. (R, CO 3)
10. Define the resolving power of a microscope. (U, CO 3)
11. Which plant group is commonly known as "Amphibians of the plant kingdom"? (R, CO 1)
12. system of classification is considered the earliest and simple system of classification. (An, CO 3)

(1 x 10 = 10)**PART B*****Answer in 30 words, each question carries 2 marks.******maximum of 20 marks can be scored***

13. Provide any two contributions of Carl Linnaeus for plant science. (U, CO 1)
14. How domestication and agriculture changed Human history? (U, CO 1)
15. Write any two applications of TLC. (U, CO 3)
16. State the role of plants in maintaining ecological balance. (A, CO 1)
17. Why Mushrooms and *Parmelia* are considered as unusual food? (U, CO 2)

18. Describe the structure of a flower. (U, CO 2)
19. How the discovery and development of Penicillin changed the world? (U, CO 1)
20. Differentiate between tabletop centrifuge and ultracentrifuge. (A, CO 3)
21. List any two functions of loading dye in Agarose Gel Electrophoresis. (U, CO 3)
22. List out any four salient features of Pteridophytes. (U, CO 2)
23. Write the composition of FAA. (U, CO 3)
24. Differentiate between TS and LS. (U, CO 3)

(2 x 10 =20)**PART C*****Answer in 75 words; each question carries 5 marks.******maximum of 20 marks can be scored***

25. Explain the general characters of Gymnosperms. (U, CO 2)
26. Write a note on PCR. (U, CO 3)
27. Pick one person mentioned below, describe their contributions to plant science, and share one opinion on how their work serves as an inspiration for your own science learning.
 - Theophrastus
 - Nicolai Ivanovich Vavilov
 - Janaki Ammal (An, CO 1)
28. Briefly explain Agarose Gel Electrophoresis. (U, CO 3)
29. Discuss the role of plants in Zoopharmacognosy and Biomimicry. How do these concepts illustrate the wonders of the plant world? Support your answer with suitable examples. (An, CO2)
30. Write the parts of a compound microscope and their functions. (R, CO 3)

(5 x 4 = 20)

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MODULE	1 MARK	2 MARK	5 MARK
1	6	6	3
2	5	5	3

3	1	1	0	250	UFYG132
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