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Name.....

Reg. No.....

**FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
APRIL 2021**

Botany

BOT 4B 04—METHODOLOGY AND PERSPECTIVES IN PLANT SCIENCE

Time : Two Hours

Maximum : 60 Marks

Section A

Answer at least eight questions.

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

1. How is a molar solution prepared ? How does it differ from a normal solution ?
2. Mention the importance of Shodhganga in research.
3. What is a histogram ? Distinguish it from a bar diagram.
4. Differentiate between percentage and ppm.
5. What is Carnoy's fluid ? What is its use ?
6. Define smear preparation.
7. How are specimens stained for viewing in a TEM ?
8. List two applications of centrifugation.
9. What are Ogives ? What is its significance ?
10. What is the principle of colorimetry ? What are its applications ?
11. Write down the formula of Standard deviation and Mean deviation.
12. How can data of research findings be presented ?

(8 × 3 = 24 marks)

Turn over

Section B

Answer at least five questions.

Each question carries 5 marks.

All questions can be attended.

Overall Ceiling 25.

13. Discuss the methods by which statistical data can be represented using a computer.
14. What do you mean by impact factor of a journal ? List out a few biological journals with impact factor.
15. What is the principle of chromatography ? Give an account on adsorption chromatography.
16. Give an account on killing and fixing process and its significance with examples.
17. Differentiate the following : Whole mounts, maceration and smear.
18. Explain the measures of central tendency.
19. What is pH ? How do you measure pH ?

(5 × 5 = 25 marks)

Section C

Answer any one question.

The question carries 11 marks.

20. What is the principle of microscopy ? Discuss the different types of microscopes used for viewing biological samples.
21. Explain the various parts of a research project. Add a note on the sources of reference.

(1 × 11 = 11 marks)