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Reg. No. : .....

Name : .....

Second Semester B.Sc. Degree Examination, May 2020

First Degree Programme under CBCSS

Botany

Foundation Course –II

BO 1221: METHODOLOGY AND PERSPECTIVES IN PLANT SCIENCE

(2014–2018 Admissions)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Write a short note on the following. **All** questions are compulsory.

1. Pseudoscience
2. Empiricism
3. Serendipity
4. Hypothesis
5. Range
6. TEM
7. Carnoy's fluid
8. Cryopreservation

P.T.O.

9. Principle of Colorimetry

10. Haematoxylin

(10 × 1 = 10 Marks)

SECTION – B

II. Answer **any eight** of the following.

11. What is knowledge? Briefly explain different types of knowledge.

12. What is a data? What are the different types of data?

13. What is double staining? Explain

14. How will you prepare a squash? Differentiate it from a smear?

15. What is chromatography? Explain various types.

16. What is a p H scale? Explain.

17. Distinguish between induction and deduction.

18. Comment on Chi-square test.

19. What is the role of ethics in science?

20. Briefly explain the diagrammatic representation of data.

21. What is micrometry? Explain.

22. What is freeze drying? Mention it's applications.

(8 × 2 = 16 Marks)

SECTION – C

III. Answer **any six** of the following.

23. What are buffers? What are its uses in biological research?

24. What is measure of central tendancy? Explain

25. What is frequency distribution? Classify.

26. Briefly explain dehydration by citing two examples.

27. What are whole mounts? Mention their significance in research.

28. Explain various digital sources of information

29. What is test of significance? Explain different tests?

30. What are bufferes? Explain.

31. Explain lyophilisation.

(6 × 4 = 24 Marks)

SECTION – D

IV. Write an essay on **any two** of the following.

32. Write an essay on steps in Scientific Methods?

33. Describe different types of measures of dispersion

34. Write an essay on various stains and staining methods in microscopy

35. What is the significance of a microscope in biological research?

(2 × 15 = 30 Marks)
