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Reg. No. :		•••••
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Name :

Third Semester B.Sc. Degree Examination, March 2021 First Degree Programme under CBCSS

Zoology

Core Course III

ZO 1341 – METHODOLOGY AND PERSPECTIVES OF ZOOLOGY (2015 to 2018 Admission)

Time: 3 Hours

Max. Marks: 80

SECTION - A

- I. Answer all questions in one or two sentences (Each question carries 1 mark).
- 1. Define science.
- 2. What is scientific temper?
- 3. What is plagiarism?
- 4. Define empiricism.
- 5. What is null hypothesis?
- Define patent.
- 7. What is standard error?
- 8. What is Rf value?
- 9. What is Svedberg unit?
- 10. Expand CDRI and CMFRI.

 $(10 \times 1 = 10 \text{ Marks})$

SECTION - B

- II. Answer any eight of the following (Each question carries 2 ma (Answer not to exceed one paragraph each)
- 11. Write short notes on scientific revolution.
- 12. What is controlled observation?
- 13. What is peer review?
- 14. Write notes on pseudoscience.
- 15. What is standard score?
- 16. Write short notes on Chi-square test.
- 17. Write short notes on taxidermy.
- 18. Distinguish between standard deviation and variance.
- 19. Write short notes on microtomy.
- 20. What is Beer-Lambert's law?
- 21. Write short notes on density-gradient centrifugation.
- 22. What are the activities of ZSI?

 $(8 \times 2 = 16 \text{ Marks})$

SECTION - C

- III. Answer any six of the following (Each question carries 4 marks) (Each answer should not exceed 120 words)
- 23. Write notes on types of knowledge.
- 24. Discuss the impact of science in human life.

- 25. Write notes on types of experiments in science.
- 26. Explain briefly different sampling methods.
- 27. Describe normal probability distribution.
- 28. What is test of hypothesis? Add notes on student's t test.
- 29. Explain briefly principle and application of phase contrast microscopy.
- 30. Write notes on autoradiography.
- 31. Describe the techniques of biological specimen preparation.

 $(6 \times 4 = 24 \text{ Marks})$

SECTION - D

- IV. Answer any two of the following (Each question carries 15 marks)
- 32. Explain in detail the principle, types and applications of electron microscopy.
- 33. Provide a detailed account of diagrammatic and graphical presentation of data.
- 34. Write an essay on design of experiments.
- 35. Give a detailed account on scientific methods.

 $(2 \times 15 = 30 \text{ Marks})$