

K - 2440

Reg. I	No.	:	 •	 	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	
NI																					

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

Zoology

Core Course - III

ZO 1341 — EXPERIMENTAL ZOOLOGY, INSTRUMENTATION BIOSTATISTICS AND BIOINFORMATICS

(2019 Admission Regular)

Time: 3 Hours

Max. Marks: 80

Draw diagrams only if specified in the question.

- Answer all questions in one or two sentences. Each question carries 1 mark.
- 1. Name the branch for the study of Ductless Glands and Hormones.
- 2. Mention opportunities for further studies in Zoology.
- Distinguish anthropology from entomology.
- 4. What is a Colorimeter?
- 5. Comment on Normal Distribution.
- 6. What is Probability?
- Define Ornithology.

25.

- Give two examples of Data presentation in Science. What is a Microtome? 8.
- 9.

 $(10 \times 1 = 10 \text{ Marks})^{26}$

- Name a stain used in light microscopy. Answer any eight out of sixteen questions. Each question carries 2 marks and
- should not exceed 1 paragraph. 11. Explain the role of Scoring Matrixes in Bioinformatics.
- List the various Input Devices of a PC.
- Give the significance of "Booting up" in Personal Computer. 13.
- Comment on TEM.
- Mention the use of Centrifuge. 15.
- Define Standard Deviation.
- Mention the uses of Chromatography. 17.
- Comment on Census method.
- What is a Histogram? 19.
- Explain Null Hypothesis. 20.
- Comment on Apiculture.
- Differentiate Mean from Median.
- Explain any one Molecular Visualisation software.

- 24. Comment on Auto radiography.
- 25. Give the significance of Linux Open Source.
- 26. Distinguish Guarantee from Warranty.

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

- III. Answer any six out of twelve questions. Each question carries 4 marks. Each answer should not exceed 120 words.
- 27. Mention the uses of FASTA software package.
- 28. Describe a Statistical Test used to accept or reject a hypothesis.
- 29. Explain structure of RNA, with a labeled diagram.
- 30. Give any two Photometry techniques and their principle.
- 31. Comment on ORF finding.
- 32. Write a short note on Correlation in data prediction.
- 33. Define Molecular phylogenetics.
- 34. What is a Dark field Microscope?
- 35. Elaborate on properties of Computer Networking.
- 36. Explain OMIM.
- 37. Differentiate DNA from RNA.
- 38. Describe various Biomolecules.

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

- IV. Answer any two out of six questions. Each question carries 15 marks. Answer as a short essay.
- 39 Describe the features of a modem PC and its Peripherals.
- 40. Citing suitable examples, explain uses of the Internet.
- 41. Write an essay on Institutes of Scientific importance in India.
- 42. Explain the principle, types and advantages of an Electron Microscope.
- 43. Elucidate the main concepts in Computer aided Drug Discovery.
- 44. List major Branches of Zoology, and mention the Career opportunities.

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