CEP VILLERARY IN

K20U 1559

Reg. No.:....

Name : .....

# V Semester B.Sc. Degree (CBCSS – Reg./Sup./Imp.) Examination, November 2020 (2014 Admn. Onwards) CORE COURSE IN ZOOLOGY

5B06 ZLG: Biophysics, Biostatistics and Methodology

Time: 3 Hours

Max. Marks: 40

#### Answer any one:

 $(1 \times 8 = 8)$ 

- Explain the principle of polyacrylamide gel electrophoresis and briefly explain its applications in biology.
- What is called scientific method? Explain briefly the steps of scientific method.

#### Answer any one:

 $(1 \times 8 = 8)$ 

- 3. What is cell fractionation? Explain briefly various types of centrifugation.
- 4. What are the methods of presentation of data by using statistical methods.

#### Answer any two:

 $(2 \times 4 = 8)$ 

- 5. What is null hypothesis? How to test a hypothesis?
- Explain in detail the biological effects of ionizing radiations.
- 7. What are the different types of ELISA? Explain.
- 8. Briefly explain the principle and applications of paper chromatography.

### Answer any six:

 $(6 \times 2 = 12)$ 

- 9. What is sampling error?
- 10. What are diversity indices ?
- 11. What is taxonomic key means?

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12. What is the difference between a histogram and a bar diagram? 13. What is plagiarism in science? 14. What is flourescence? 15. What is meant by resolution of a microscope? 16. What is empiricism? The solution and a solution  $(4 \times 1 = 4)$ Answer all the questions: 17. \_\_\_\_\_ is an example for vital stain. 18. Abbe' formula is related to 19. \_\_\_\_\_ is the light source of a fluorescent microscope. 20. Cumulative frequency curve is otherwise called as \_\_\_\_\_\_