

TB141400

Reg. No.

Name:

**B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2014
ZOOLOGY – FIRST SEMESTER – CORE COURSE
ZOO1GMPS – GENERAL METHODOLOGY & PERSPECTIVES IN SCIENCE**

Time: 3 hours

Total Marks: 60

PART I

(Answer **all**. 1 mark each)

1. Which is the internationally accepted standard metric system?
2. Define epidemiology.
3. Hypothesis
4. Name the electrodes in a pH meter.
5. Vivisection
6. What is Pooter?
7. What do you mean by scientific temper?
8. What is Numerical aperture?

(8X1=8)

PART II

(Answer any **six**; answer in one paragraph each)

9. Discuss the structure of a scientific paper.
10. Define the following: a] Population b] Community
11. What are the ethical guidelines to be followed for use of animals in Scientific Research?
12. Distinguish between inductive and deductive reasoning.
13. Write the principle of electrophoresis.
14. What is Right to Information Act? When was the act enacted in India?
15. How can you differentiate seminar from a colloquium?
16. How do you preserve hard bodied and soft bodied insects?
17. How is phase contrast achieved in phase contrast microscopy?
18. Differentiate between molarity and normality.

(6X2=12)

(P.T.O)

PART III

(Answer any **four**; answer in one page each)

19. What is micrometry? Write down the procedure to find the diameter of a microorganism.
20. Describe the art of research proposal writing.
21. What are the guidelines to be followed in the construction and maintenance of an animal house?
22. Explain 3 Rs philosophy in International animal protection initiatives.
23. Give an account of the characteristics of living things.
24. Comment on the steps involved in Scientific Method.

(4X4=16)

PART IV

(Answer any **two**; answer should not exceed four pages)

25. Write an essay on the principle, types, components and uses of spectrophotometer.
26. Elucidate the landmarks in the progress of Biology.
27. Explain the various Animal rights and laws in India.
28. Describe the various fishing gears used for fish collection.

(2X12=24)