

**B.Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER/NOVEMBER 2018****SEMESTER –1: ZOOLOGY (CORE COURSE)****COURSE: U1CRZOO1: GENERAL METHODOLOGY AND PERSPECTIVES IN SCIENCE***(For supplementary - 2014 admission)*

Time: Three Hours

Max. Marks: 60

**PART A***Answer **all** questions. Each carries **1** mark*

1. What are buffers?
2. Define resolution of a microscope
3. Name the two major methods in science for reasoning
4. Define empiricism
5. Define epistemology.
6. What is taxidermy?
7. Define Rf value
8. What is scientific temper?

*(1 x 8 = 8)***PART B***Answer **any six** questions. Each carries **2** marks*

9. What is camera Lucida?
10. Comment on the application of colorimeter?
11. What is a workshop?
12. Comment on the different types of Scientific drawings
13. Distinguish between colloquium and conference.
14. Comment on the difference between fluorescence microscope and ordinary bright field microscope
15. Write five characteristics of living organisms.
16. Enumerate the applications of phase contrast microscope?

*(2 x 6 = 12)***PART C***Answer **any four** questions. Each carries **5** marks*

17. What are the ethical guidelines for the use of animals in scientific research?
18. Describe the regulations of Biodiversity Act 2003?
19. Explain the different types of centrifuges
20. What are the common methods for collecting birds?
21. Explain the principle and working of a pH meter.
22. Write an account on research report writing.

*(5 x 4 = 20)***PART D***Answer **any two** questions. Each carries **10** marks*

23. Explain the revolutions in science and technology
24. Write an account on Electron Microscope and its applications.
25. Explain the major branches of biology.
26. Write an essay on chromatography and its applications

*(10 x 2 = 20)*