

20U518S

(Pages: 2)

Name:

Reg. No:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(CUCBCSS-UG)

CC15U ZO5 B09 - GENERAL METHODOLOGY IN SCIENCE, BIostatISTICS

AND INFORMATICS

(Zoology – Core Course)

(2015 to 2018 Admissions – Supplementary/Improvement)

Time: Three Hours

Maximum: 80 Marks

I. Answer **all** questions. Each question carries 1 mark.

1. is an example of measure of dispersion.
2. is a method of analysis of variance.
3. INSDOC is a depository of research publication functioning under
4. Experiment done in natural settings than in a laboratory is known as.....
5. Degree of freedom is
 - a) $(n/2)$
 - b) $n+1/2$
 - c) $n-1$
 - d) $2n-1$
6. Knowledge can be acquired only through experience is one of the cardinal points of
 - a) Empiricism
 - b) Scientific temper
 - c) Scientific discipline
 - d) Scientific evidence
7. Free software foundation was founded by
8. lures internet users to reveal sensitive information, leading to identity theft
9. Expand the term - VIRUS
10. is a computing standard for encoding, and handling of text of most of the world's languages

(10 × 1 = 10 Marks)

II. Short answer questions. Answer any **ten** questions. Each question carries 2 marks.

11. Comment on percentage bar diagram.
12. Comment on type I and type II statistical errors.
13. Importance of virtual testing.
14. Comment on pie diagram.
15. What is plagiarism?
16. Comment on primary sources of scientific information.
17. Explain variables in scientific experiments.
18. Define Biocomputing. What are its applications?
19. What is artificial intelligence? What are its uses?

20. Explain virtual reality.
21. Give an account on Wikipedia.
22. Explain advantages of Linux.

(10 × 2 = 20 Marks)

III. Short essay questions. Answer any *five* questions. Each question carries 6 marks.

23. Write a short essay on principles of experimental design.
24. Explain chi-square test.
25. Comment on kinds of experiments.
26. Comment on diagrammatic presentation of data.
27. Explain Standard error.
28. Describe benefits of e-Governance.
29. Write notes on various aspects of intellectual property right.
30. Write notes on cyber laws and cyber ethics.

(5 × 6 = 30 Marks)

IV. Essay questions. Answer any *two* questions.

31. Briefly describe methods of sampling.
32. Explain measures of central tendency.
33. Write an essay on ethics in science.
34. Write an essay on various academic services.

(2 × 10 = 20 Marks)
