

D 50629

(Pages : 2)

Name.....

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2018

(CUCBCSS—UG)

Zoology

ZOL 5B 09—GENERAL METHODOLOGY IN SCIENCE, BIostatISTICS AND  
INFORMATICS

Time : Three Hours

Maximum : 80 Marks

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

- 1 What is meant by experiment ?
- 2 Define plagiarism.
- 3 What is auxiliary hypothesis ?
- 4 What is digital divide ?
- 5 What is meant by sample ?
- 6 What is meant by biostatistics ?
- 7 What is software piracy ?
- 8 Give the full form of NICNET.
- 9 What is virtual reality ?
- 10 What is green computing ?

(10 × 1 = 10 marks)

B. Answer any *ten* questions in two or three sentences each. Each carries 2 marks :

- 11 What is scientific evidence ?
- 12 What is Section 17.1(d) ?
- 13 What is deductive reasoning ? List its advantage.
- 14 Explain the importance of selection of controls in the design of experiment.
- 15 What is meant by models in science ? List any *two* roles of models.
- 16 What is goodness of fit ? Give an example.
- 17 What is meant by measures of central tendency ? List the different types.
- 18 What is sampling error ?
- 19 What is t-test ?

Turn over

- 20 What is biocomputing ?
- 21 What is information overload ? Mention its demerit.
- 22 What is e-governance ?

(10 × 2 = 20 marks)

C. Answer any *five* questions in not more than a paragraph each. Each carries 6 marks :

- 23 Give an account on different types of thought processes in developing hypothesis.
- 24 What is Intellectual Property Right ? Explain the concept.
- 25 Explain the different types of graphic representation of data.
- 26 Explain the differences between null hypothesis and alternate hypothesis.
- 27 Explain internet as a knowledge repository. Also, explain the different internet access methods?
- 28 Explain in detail any *three* threats in IT field.
- 29 Explain Cyber Laws.
- 30 Explain the applications of IT in medicine and healthcare.

(5 × 6 = 30 marks)

D. Write essays on any *two* of the following. Each carries 10 marks :

- 31 What is hypothesis ? What are the different types of hypothesis ? Explain the formulation and testing of hypothesis.
- 32 Write an essay on the different types of measures of central tendency. Explain the merits and demerits of each.
- 33 What is cyber crime ? Explain in detail the different aspects of cyber crimes.
- 34 Give a detailed account on INFLIBNET, NICNET and ERNET as academic services.

(2 × 10 = 20 marks)