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Reg. No. : .....

Name : .....

Third Semester B.Sc. Degree Examination, December 2017
First Degree Programme under CBCSS
ZOOLOGY
Core Course
ZO 1341 : Methodology And Perspectives of Science and Zoology
(2014 Admission)

Time : 3 Hours Max. Marks : 80

Instruction *: Draw diagrams* ***wherever*** *necessary.*

I. Answer **all** questions in **one** or **two** sentences. **Each** question carries **one** mark.

1) What is the difference between a simple and compound microscope ?
2) What is Embedding ?
3) Give the full form of TEM and SEM.
4) What is RF value ?
5) What is an aspirator ?
6) What is controlled and uncontrolled observation ?
7) What is primary data ?
8) What is histogram ?
9) What is binomial nomenclature ?
10) What is scientific temper ? **(10×1=10 Marks)**

II. Answer **any eight** of the following (answers **not** to exceed **one** paragraph) **Each** question carries **two** marks.

11) What is ogive ?
12) What is patent ? What is its advantage ?
13) What is calomel electrode ?
14) What is Chi-square test ?
15) Write any four characteristics of hypothesis.
16) Describe phylogenetic species concept.

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17) What is double staining ?

18) List essential parts of a colorimeter.

19) What is taxidermy ?

20) What is research bias or experimenter bias ?

21) Explain the use of control in an experiment.

22) What is density gradient centrifugation ?

(8×2=16 Mark

III. Answer **any six** of the following. (**Each** answer should **not** exceed **120** words.) **Each** question carries **four** marks.

23) Write a brief account on statistical testing .

24) Explain five kingdom classification.

25) Explain the principle of fluorescent microscope. Write important applications.

26) Briefly explain nature and scope of zoology.

27) Write important features of science.

28) Write an account on molecular taxonomy.

29) Write an account on robotics.

30) Explain
   a) Priority
   b) Tautonyms
   c) Synonymy
   d) Homonymy.

31) Write an account on types of bias which can occur in research.

(6×4=24 Mar

IV. Answer **any two** of the following. **Each** question carries **fifteen** marks.

32) Explain the principle of electrophoresis. Explain different types of electrophoresis and its applications.

33) Write an essay on species concept.

34) Explain the principle of electron microscope. Write the differences between TEM and SEM.

35) Write an essay on different methods adopted for data presentation.

(2×15=30 Mar

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