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(Pages : 2)

Name.....

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Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, FEBRUARY 2013

(CUCSS)

Zoology

ZO 1C T03—SYSTEMATIC AND EVOLUTION

(2010 admissions)

Time : Three Hours

Maximum : 36 Weightage

I. Answer the following :—

- 1 What is "chemotaxonomy" ?
- 2 What is the significance of Typological species ?
- 3 Precisely describe what is "Cladistics".
- 4 Distinguish between "Homonymy" and "Synonymy".
- 5 Briefly describe taxonomic key.
- 6 How is DNA bar coding important ?
- 7 Precisely explain hierarchial classification.
- 8 How is "Sibling species" different from "sub species" ?
- 9 What is meant by "intrasexual selection" ?
- 10 Explain what a "Gene Pool" is.
- 11 Precisely explain what "Gradualism" is.
- 12 What is meant by "Epistasis" ?
- 13 Briefly outline what "stabilizing selection" is.
- 14 What is meant by "Meiotic drive" ?

(14 × 1 = 14 weightage)

II. Answer any seven of the following :—

- 15 Give an account on Numerical Taxonomy.
- 16 Explain the major rules of ICZN.
- 17 Describe "simple non-bracket" key.
- 18 Comment on "Biochemical Taxonomy".
- 19 Evaluate the ethics to be considered in "Taxonomic Publication".
- 20 Describe "Phylogenetic Classification".
- 21 Explain "Bottleneck phenomenon" and its significance.
- 22 Describe the relevance of "punctuated equilibrium".
- 23 Enumerate the role of "secondary sexual characters" in Natural Selection.
- 24 Explain "Parsimony Analysis".

(7 × 2 = 14 weightage)

Turn over

III. Answer any two of the following :—

- 25 Analyse and evaluate the major phases of "Primate Evolution".
- 26 Give an account of Hardy-Weinberg Law and significance in the light of evolutionary process.
- 27 Enumerate the different kinds of Taxonomic characters.
- 28 Describe the major "historical phases" leading to Modern Systematics.

(2 × 4 = 8 weightage)

Maximum : 38 Weightage

(14 × 1 = 14 weightage)

(7 × 2 = 14 weightage)

Turn over