

Roll No.....

Total No. of Section : 03

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Code No. : 01/105(B)

First Semester Examination, Dec. - 2017

M.Sc. ZOOLOGY

Paper - I

BIOSYSTEMATICS AND TAXONOMY

Time : 3 Hrs.

Max.Marks : 80

Note :Section 'A', consists of 10 very short answer type questions, all of which are compulsory and should be attempted first. Section 'B' consists of four short answer type questions with internal options. Section 'C' consists of four long answer type questions with internal choice.

Section-'A'

Answer the following very short-answer-type questions in one or two sentences. (2x10=20)

- Q-1. What is Alpha taxonomy?
- Q-2. Write two problems of taxonomists.
- Q-3. Define Chemotaxonomy.
- Q-4. Define species.
- Q-5. Name four factors affecting speciation.
- Q-6. Define Biodiversity.
- Q-7. Give two examples of In-situ conservation.
- Q-8. Define Dichotomous key.
- Q-9. Write the method of preserving insects.
- Q-10. Write the role of Curator.

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Section-'B'

Answer the following short-answer-type questions with word limit 200-250. (5x4=20)

Q-1. Write about contributions of any five Taxonomists.

OR

Write importance of Taxonomy in brief.

Q-2. Write note on Typological Species concept.

OR

Write about Polytypic Species.

Q-3. What are the major threats to biodiversity? Explain.

OR

Write note one Ex-situ conservation.

Q-4. Describe various collecting ways to catch insects.

OR

Write about ICZN in brief.

Section-'C'

Answer the following long-answer-type questions with word limit 400-450. (10x4=40)

Q-1. Describe applications of Biosystematics in any four fields of Biology.

OR

What is Cytotaxonomy? Describe use of various techniques in study of cytotaxonomy.

Q-2. What is speciation? Describe Allopatric and Sympatric speciation with their differences.

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OR

Define Taxonomic attributes and explain any four attributes used in Taxonomy.

Q-3. What is Hierarchy of categories? Explain obligatory categories with suitable examples.

OR

What is reproductive isolation? Describe Pre-zygotic mechanism of genetic incompatibility of species.

Q-4. Define taxonomic key? Describe any three types of keys with their merits and de-merits.

OR

Describe process of curating of animals.

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