

G-1/189/22

Roll No.

I Semester Examination, January 2022

M.Sc.

ZOOLOGY

Paper I

(Biosystematics and Taxonomy)

Time : 3 Hours]

[Max. Marks : 80

Note : *All questions are compulsory. Question Paper comprises of 3 Sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.*

SECTION A

1×8=8

(Objective Type/Multiple Choice Questions)

Choose the correct answer :

- 1.** The term taxonomy was coined by :
- (a) Theophrastus (b) De candolle
(c) Linnaeus (d) Pliny

P.T.O.

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- 2.** The term taxon was given by :
- (a) Linnaeus (b) Lamark
(c) Meyor (d) John Ray
- 3.** Karyotaxonomy is a component of :
- (a) Experimental taxonomy
(b) Cytotaxonomy
(c) Numerical taxonomy
(d) Biochemical taxonomy
- 4.** Which of the following is not covered under taxonomy ?
- (a) Alpha taxonomy
(b) Beta taxonomy
(c) Delta taxonomy
(d) Gamma taxonomy
- 5.** Two organism with different correlated morphological characters belong to :
- (a) One biological species
(b) Two biological species
(c) Two taxonomic species
(d) One taxonomic species

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6. Related species which are reproductively isolated but morphological similar :

- (a) Sibling (b) Allopatric
- (c) Sympatric (d) Morphospecies

7. In an artificial system of classification :

- (a) A large no. of characters taken in to consideration
- (b) Correlated characters are relied
- (c) Physiological characters are relied
- (d) One or two morphological characters are considered

8. Isotype is a specimen :

- (a) Duplicate of holotype
- (b) Described along with holotype
- (c) Nomenclature type when the original is missing
- (d) Cited by author when there is no holotype.

SECTION B

6×4=24

(Short Answer Type Questions)

Note : Answer the following questions in **250** words.

1. Write short note on important of taxonomy

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P.T.O.

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Or

What is Genus ? Explain.

2. Write note on "Identification of animals".

Or

Write note on Aspirator.

3. Write note on any *one* of the following :

- (a) Eco one Eeno species
- (b) Peripatric Speciation
- (c) Polytypic species.

4. Write about purpose of key.

Or

Holotype explain with example.

SECTION C

12×4=48

(Long Answer Type Questions)

Note : Answer the following questions in **500** words.

1. Write about morphological and physiological characters.

Or

Explain Linnean hierarchy.

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- 2.** Describe the cytological and Biochemical approach in newer trend in Biosystematics.

Or

Describe the method of preservation of collected material.

- 3.** Describe the origin of species.

Or

Explain the biological and typological species concept.

- 4.** Explain the artificial and natural classification.

Or

Write about indented, circular and Pictorial key.

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