

Roll No. \_\_\_\_\_

[Total No. of Pages : 2

**PGIS-060-A-22**  
**M.Sc. I Semester Degree Examination**  
**ZOOLOGY**  
**Aquatic Biology**  
**Paper - SCT - 1.1 (ii)**

**Time : 3 Hours**

**Maximum Marks : 80**

***Instructions to Candidates:***

1. All questions carry equal marks.
2. Illustrate your answer's wherever necessary.

Answer the following in brief.

(8×2=16)

1. a) Benthos.  
b) Ecological Pyramid.  
c) Migration.  
d) Parental care.  
e) Fin fish.  
f) Crafts.  
g) Fresh Water Habitat.  
h) Temperature.
2. a) Describe the classification and distribution of plankton. (16)  
(OR)  
b. Explain reproductive cycles in fishes.
3. a. Write an essay on hybridization and cryopreservation. (16)  
(OR)  
b. Give an account on distribution of freshwater fishes of India.
4. Write an explanatory notes any Two of the following : (2×8=16)  
a. Morphometry of lakes.  
b. Conservation of wetlands.  
c. Fishery research institutes in India.

5. Write short notes on any **Four** of the following :

**(4×4=16)**

- i) Lotic habitats.
- ii) Air breathing organs.
- iii) Biological zonation.
- iv) Ornamental fishes.
- v) Mariculture.

Roll No. \_\_\_\_\_

[Total No. of Pages : 2

**PGIS-059-A-22**  
**M.Sc. I Semester Degree Examination**  
**ZOOLOGY**  
**Biostatistics and Computer Applications**  
**Paper - SCT - 1.1 (i)**

**Time : 3 Hours**

**Maximum Marks : 80**

***Instructions to Candidates:***

1. All questions carry equal marks.
2. Illustrate your answers wherever necessary.

Answer the following in brief.

(8×2=16)

1. a) Central Tendency.  
b) Probability.  
c) Regression.  
d) Un-paired tests.  
e) Software.  
f) Mouse.  
g) Expand BLAST.  
h) Internet.
2. a) Give an account on programme languages in computer. (16)  
(OR)  
b) Explain operating system of computer.
3. a) Describe sequence analysis and its types. (16)  
(OR)  
b) Give a detailed account on computer applications in genomics.

4. Write an explanatory notes on any **Two** of the following : (2×8=16)

- a) Multiplication rules of probability.
- b) Tests of significance.
- c) Multiple correlation.

5. Write short notes on any **Four** of the following : (4×4=16)

- i) Nucleotide sequence.
  - ii) 't' test.
  - iii) Non - random sampling.
  - iv) Data reduction
  - v) Gene.
  - vi) Output devises.
-

4. Write an explanatory notes on any **Two** of the following : **(2×8=16)**

- a) Multiplication rules of probability.
- b) Tests of significance.
- c) Multiple correlation.

5. Write short notes on any **Four** of the following : **(4×4=16)**

- i) Nucleotide sequence.
  - ii) 't' test.
  - iii) Non - random sampling.
  - iv) Data reduction
  - v) Gene.
  - vi) Output devises.
-

Roll No. \_\_\_\_\_

[Total No. of Pages : 2

PGIS-056-A-22  
M.Sc. I Semester Degree Examination  
ZOOLOGY

Biosystematics, Structure and Functions of Invertebrates

Paper : HCT - 1.1

Time : 3 Hours

Maximum Marks : 80

*Instructions to Candidates:*

1. All questions carry equal marks.
2. Illustrate your answers wherever necessary.

1. Answer the followings in brief.

(8×2=16)

- a) Phenetics.
- b) Apomictic species.
- c) Biosystematics.
- d) Malphigian tubules.
- e) Osmoregulation.
- f) Trochophore.
- g) Redia.
- h) Typification.

2. a) Write a note on species concepts and mechanism of speciation.

(16)

(OR)

b) Explain the filter feeding mechanism in polychaetes.

3. a) Give an account on larval forms of free living invertebrates.

(16)

(OR)

b) Describe the modifications in the digestive system of Arthropoda and Mollusca.

Roll No. \_\_\_\_\_

[Total No. of Pages : 2

**PGIS-056-A-22**  
**M.Sc. I Semester Degree Examination**  
**ZOOLOGY**

**Biosystematics, Structure and Functions of Invertebrates**

**Paper : HCT - 1.1**

**Time : 3 Hours**

**Maximum Marks : 80**

***Instructions to Candidates:***

1. All questions carry equal marks.
2. Illustrate your answers wherever necessary.

1. Answer the followings in brief.

**(8×2=16)**

- a) Phenetics.
- b) Apomictic species.
- c) Biosystematics.
- d) Malphigian tubules.
- e) Osmoregulation.
- f) Trochophore.
- g) Redia.
- h) Typification.

2. a) Write a note on species concepts and mechanism of speciation.

**(16)**

**(OR)**

b) Explain the filter feeding mechanism in polychaetes.

3. a) Give an account on larval forms of free living invertebrates.

**(16)**

**(OR)**

b) Describe the modifications in the digestive system of Arthropoda and Mollusca.

4. Write an explanatory notes on any **TWO** of the following :

(2×8=16)

- a) Digestive system in Arthropoda.
- b) Nervous system in Coelenterata and Echinodermata.
- c) Evolutionary significance of larval forms.

5. Write short notes on any **FOUR** of the following :

(4×4=16)

- i) Nervous system in insects.
- ii) Taxonomic keys.
- iii) Respiratory pigments.
- iv) Crustacean parasites.
- v) Phylogenetic tree.
- vi) Sipunculida.