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1 SEM TDC ZOO M 1 (N/O)

2018

(November)

ZOOLOGY

(Major)

Course : 101

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

(New Course)

**(Non-chordate Diversity, Systematics and
Evolution)**

1. Fill in the blanks : 1×5=5
- (a) Volutin granules are found in _____.
 - (b) _____ is the first phylum to illustrate the organ system.
 - (c) Minute scales are present in the wings of the insects of the order _____.
 - (d) Animals, that bear spines on their skin, are grouped as phylum _____.
 - (e) In the hierarchy of classification only _____ categories were used by Carolus Linnaeus.

2. Write short notes on any *two* of the following : 3½×2=7

- (a) Hierarchy of classification
- (b) Numerical taxonomy
- (c) Cladistic classification
- (d) Type concept in zoological nomenclature

3. What is cnidoblast? Write about the different types of cnidoblast and mode of action of it.

1+4+4=9

Or

Explain different modes of locomotion in Protozoa.

9

4. What is septal nephridium? Where is it located and what physiological function does it perform? Describe the structure of septal nephridium of *Pheretima*.

1+1+1+6=9

Or

Classify Nematelminthes up to order with examples.

9

5. Give an account of mouthparts in insects with suitable diagrams.

9

Or

Prepare a note on vision of arthropods.

9

6. What is ctenidia? Write about the different modes of respiration found in *Pila*.

2+7=9

Or

What is water vascular system? Discuss water vascular system in starfish.

1+8=9

(3)

(Old Course)

(Animal Diversity—I and Systematics)
ANIMAL DIVERSITY—I (NON-CHORDATE)

(Marks : 32)

1. Fill in the blanks : 1×3=3
- (a) In Protozoa, different species of the class _____ bear cilia.
- (b) *Fasciola* belongs to the class _____.
- (c) Animals having mesoglea in their body wall belong to the phylum _____.
2. Write on the following (any two) : 4×2=8
- (a) General characters of Coelenterata
- (b) General characters of the class Crustacea
- (c) General characters of Mollusca
- (d) General characters of Echinoderm
3. What is polymorphism? Describe the polymorphism in coelenterates. 1+6=7

Or

Discuss about the skeletal materials in Porifera.

7

4. Describe the structure and function of septal nephridium of *Pheretima*. 7

Or

Write a note on excretion in Arthropoda. 7

5. What is torsion? Write about the shell diversity in Mollusca. 1+6=7

Or

Write about the affinities of echinoderm larva. 7

SYSTEMATICS

(Marks : 16)

6. Fill in the blanks : 1×2=2

(a) In hierarchy of classification _____ categories are commonly used.

(b) A group of individuals having interbreeding capacity is known as _____.

7. Why is zoological nomenclature needed? Write four specific rules of zoological nomenclature. 2+4=6

8. Write short notes on (any two) : 4×2=8

(a) Molecular taxonomy

(b) Cytotaxonomy

(c) Numerical taxonomy

(d) Linnaean hierarchy
