2016

(CBCS)

ZOOLOGY

FIRST PAPER

(Biosystematics and Biology of Nonchordates)

Full Marks : 75

Time : 3 hours

(PART : B—DESCRIPTIVE)

(*Marks* : 50)

The figures in the margin indicate full marks for the questions

1. Write a note on the importance of taxonomy. Write in detail the three domain systems of classification. 2+8=10

Or

Write a note on species concepts. 10

2. Write the characteristic features of the following phyla with suitable examples : 10

Porifera, Nematoda, Annelida and Echinodermata

Or

Write a note on reproduction in Protozoa. 10

3. What are corals? Explain different types of coral reef. 2+8=10

Or

Explain the canal system in phylum Porifera. 10

4. Write a note on excretion in phylum Nematoda with suitable diagram. 8+2=10

Or

Write a note on circulation in phylum Annelida with suitable diagram. 8+2=10

5. Write a note on respiratory system of phylum Arthropoda. 10

Or

Explain the general anatomy of *Asterias*. Add a note on water-vascular system. 6+4=10

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Subject Code :
ZOO/I/EC/01 (CBCS)

Booklet No. A

Date Stamp .....

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To be filled in by the Candidate

CBCS
DEGREE 1st Semester
(Arts / Science / Commerce / .....) Exam., **2016**

Subject .....
Paper .....

To be filled in by the Candidate

CBCS
DEGREE 1st Semester
(Arts / Science / Commerce / .....) Exam., **2016**

Roll No. .....
Regn. No. .....

Subject .....
Paper .....

Descriptive Type
Booklet No. B .....

INSTRUCTIONS TO CANDIDATES

1. **The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.**
2. **This paper should be ANSWERED FIRST and submitted within 1 (one) Hour of the commencement of the Examination.**
3. **While answering the questions of this booklet, any cutting, erasing, over-writing or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.**

Signature of Scrutiniser(s) *Signature of Examiner(s)* *Signature of Invigilator(s)*

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ZOO/I/EC/01 (CBCS)

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(CBCS)

ZOOLOGY

FIRST PAPER

(Biosystematics and Biology of Nonchordates)

(PART : A—OBJECTIVE)

(*Marks* : 25)

The figures in the margin indicate full marks for the questions

SECTION—I

(*Marks* : 10)

Tick (✓) the correct answer in the brackets provided : 1×10=10

1. The basic unit of classification in taxonomy is

(a) species ( )

(b) genus ( )

(c) kingdom ( )

(d) phylum ( )

2. Kingdom Monera was split into Archaea and Eubacteria based on

(a) rRNA ( )

(b) plasma membrane ( )

(c) lipid structure ( )

(d) All of the above ( )

3. Flame cells are found in the phylum

(a) Nematoda ( )

(b) Platyhelminthes ( )

(c) Arthropoda ( )

(d) All of the above ( )

4. Choanocyte cells are unique to the phylum

(a) Arthropoda ( )

(b) Porifera ( )

(c) Mollusca ( )

(d) Cnidaria ( )

5. Metamers are found in the phyla

(a) Platyhelminthes ( )

(b) Arthropoda ( )

(c) Annelida ( )

(d) All of the above ( )

6. Metazoans originate during _____ period of geological time scale.

(a) Cambrian ( )

(b) Ediacaran ( )

(c) Devonian ( )

(d) Jurassic ( )

7. Sexually, earthworms are

(a) hermaphroditic but not self-fertilizing ( )

(b) parthenogenic ( )

(c) hermaphroditic and self-fertilizing ( )

(d) None of the above ( )

8. Comb paddle in the Ctenophores are used for

(a) locomotion ( )

(b) digestion ( )

(c) respiration ( )

(d) All of the above ( )

9. The functions of waste removal and respiration are combined in which of the following *Asterias* body parts?

(a) Papula ( )

(b) Madreporite ( )

(c) Tube feet ( )

(d) Pedicellaria ( )

10. The radula of *Pila globosa* are used for

(a) respiration ( )

(b) reproduction ( )

(c) locomotion ( )

(d) feeding ( )

SECTION—II

(*Marks* : 15)

Write short notes on the following : 3×5=15

1. Kingdom Animalia

Or

Rules of binomial nomenclature

2. Flagellar movement in Protozoa

Or

Ciliary movement in Protozoa

3. Origin of Metazoa

Or

Alternation in generation amongst Hydrozoa

4. Affinities of Ctenophora

Or

Nephridia

5. Spiracles

Or

Role of hormones in insect metamorphosis

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