2023	
(CBCS)	
(1st Semester)	
ZOOLOGY	l ts
FIRST PAPER	
(Biosystematics and Biology of Non-chordates)	
Full Marks: 75	
Time: 3 hours	
The figures in the margin indicate full marks for the questions	5.00
(SECTION : A—OBJECTIVE)	
(Marks: 10)	
Tick (✓) the correct answer in the brackets provided:	1×10=10
1. The system of taxonomic hierarchy was introduced by	· ·
(a) Carolus Linnaeus ()	
(b) E. P. Odum ()	
(c) Herbert Spencer () (d) Ernst Mayr ()	
2. The lowest unit of taxonomy is	
(a) genus ()	
(b) family ()	
(c) order ()	*
(d) species ()	

3.	The	special type of binary fission where multinucleate protozoa divide into
	two	or more daughter individuals is called
	(a)	budding ()
	(b)	multiple fission ()
	(c)	plasmotomy
	(d)	plasmogamy
4.	Coe	lenterates are
	(a)	
	(b)	and diploblastic ()
	(c)	coelomates and triploblastic ()
	(d)	pesudocoelomates and diploblastic ()
	(4)	acoelomates and triploblastic ()
5.	The	reproductive individuals in polymorphisms are called
	(a)	gastrozooid ()
	(b)	dactylozooid ()
	(c)	gonozooid
	(d)	gametozooid ()
6	Dod	lio1 comment
٥.		lial symmetry is best seen in
	(a)	molluscans ()
	(b)	sponges ()
	(c)	starfish ()
	(a)	fishes ()
7.	The	largest nephridia of Pheretima are
	(a)	septal nephridia ()
	(b)	pharyngeal nephridia ()
	(c)	integumentary nephridia ()
	(d)	cuticle nephridia ()
8.	In e	earthworm, the pair of ovaries lies in the
	(a)	11th segment ()
	(b)	12th segment ()
	(c)	13th segment ()
	(d)	14th segment ()

9. The hormone involved in insect me	etamorphosis is
(a) parathormone ()	
(b) oxytocin ()	2. Solitar Charles of Chemophora
(c) juvenile hormone ()	45.4.
(d) calcitonin ()	6 ye 1 4 3 3
10. The chief excretory waste of insect	ts is
(a) urea ()	
(b) ammonia ()	9 imigraet. holous incremorphosis
(c) uric acid ()	20
(d) amino acid ()	ala section of
(#	
(SECTION : B-	SHORT ANSWERS)
(Ma	urks: 15)
Write short notes on the following:	3×5=15
	3^3-13
	JNIT—I
1. Binomial nomenclature	
OR	
2. Biological species concepts	e e e e e e e e e e e e e e e e e e e
gran openios consoptis	
a	JNIT—II
3. Conjugation in Paramecium	
dearth OR! a	
	ביין למוקפן שלה ממי פיימותה
4. Binary fission in protozoa	
	Unit—III
5. Syconoid type of canal system	e jok south journal a njeu
OR	
6. Coelom	

3

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[Contd.

7. Salient features of Ctenophora

OR

8. Reproductive system in Taenia

UNIT-V

9. Holometabolous metamorphosis

OR

10. Malpighian tubules of cockroach

(SECTION : C-DESCRIPTIVE)

(Marks : 50)

Answer the following questions:

10×5=50

UNIT-I

Write an account on the five kingdom classification.

OR

2. Explain the concept of taxonomic hierarchy.

UNIT-II

3. Explain the different types of locomotion in protozoa.

OR

4. Write the salient features of phylum Annelida. Classify phylum Annelida up to classes with one example each.

UNIT-III

5. What is symmetry in animals? Write an account on the different types of symmetry in animals.

OR

6. What is a coral reef? Explain the different kinds of coral reefs.

[Contd.

UNIT-IV

7. Write an account on the salient features and affinities of Onychophora.

OR

8. Explain the male and female reproductive systems in Pheretima posthuma.

Unit-V

9. Describe the circulatory system in Periplaneta americana with suitable diagram.

OR

10. Write an account on social organization in insects.

* * *

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