



31132

(NEP)

B.Sc. I Semester Degree Examination, February/March- 2023

ZOOLOGY

Cytology, Genetics and Infectious diseases

Paper : Z 1.1 (DSCA)

Time : 3 Hours

Maximum Marks : 60

*Instructions to Candidates :*

- 1) Part - A : All questions are compulsory
- 2) Part -B : Answer any Five full questions.

Draw neat labelled diagrams wherever necessary

**PART - A**

**I. Answer the following.**

(10×1=10)

- 1 a) Ribosomes.
- b) Monohybrid Cross.
- c) Genotype.
- d) Microtubule.
- e) Heterochromatin.
- f) Sex linked inheritance.
- g) Interphase.
- h) Exocytosis.
- i) RNA.
- j) Apoptosis.

**PART - B**

**II. Answer any FIVE of the following .**

(5×10=50)

2. a) Explain fluid mosaic model of Plasma membrane.
- b) Illustrate various stages of Mitosis. (10)
3. a) Explain structure and functions of Eukaryotic nucleus.
- b) Explain cell cycle and apoptosis. (10)

[P.T.O.]







4. a) Explain Mendelian dihybrid cross.  
b) Write a note on Genetic Sex determining system. (10)
5. a) Make a note on chromosomal aberrations.  
b) Explain life cycle of Trypanosoma. (10)
6. a) Explain Inheritance of ABO blood group in man.  
b) Define sex influenced and sex limited characteristics with example. (10)
7. a) Describe the structure of mitochondria and its functions  
b) Explain Dominant Epistasis. (10)
8. a) Write a note on pathogenecity causes, symptoms and preventive measures of Elephantiasis.  
b) Explain Chromatin organization in chromosomes. (10)





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B.Sc. I Semester Degree Examination, March/April 2022

ZOOLOGY

Z.1.1 (DSCA) : Cytology, Genetics and Infectious Diseases (New)

Time : 3 Hours

Max. Marks : 60

- Instructions :** 1) Part – A : All questions are **compulsory**.  
2) Part – B : Answer **any five full** questions.  
3) Draw **neat** labelled diagrams **wherever** necessary.

PART – A

1. Answer the following. (10×1=10)
- Interphase
  - Peroxisomes
  - Cell cycle
  - Genotype
  - Dominant alleles
  - Gene penetrance
  - Trisomy
  - Sex influenced trait
  - Apoptosis
  - Endocytosis.

PART – B

- Answer **any five** of the following. (5×10=50)
- Describe the structure of Mitochondria and its functions. 10
    - Explain chromatin organization of chromosome.
  - Briefly explain Mitotic cell division. 10
    - Describe the structure of DNA.

P.T.O.





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4. a) Describe Monohybrid cross. 10  
b) Explain genic balance theory of sex determination in *Drosophila*.
  5. a) Briefly explain 'X' – linked recessive gene inheritance. 10  
b) Explain inheritance of ABO Blood group in Man.
  6. a) Explain structure and function of Nucleus. 10  
b) Describe the structure and functions of Ribosome.
  7. a) Illustrate Dominant Epistasis. 10  
b) Write a note on structural chromosomal aberration.
  8. a) Briefly explain life cycle of *Wuchereria bancrofti*. 10  
b) Differentiate Microtubules and Microfilaments.
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27125(New)

B.Sc. I Semester Degree Examination, March/April - 2021

ZOOLOGY

Biology of Non-Chordata

Paper - Z-1.1

(New)

Time : 3 Hours

Maximum Marks : 60

*Instructions to Candidates:*

1. Part - A All questions are Compulsory
2. Part-B Answer any **five** question out of seven question
3. Draw a neat labelled diagram wherever necessary

**PART - A**

**I** Answer the following

(10×1=10)

- 1) Schizogony.
- 2) Pedal ganglia.
- 3) Spongocoel.
- 4) Diploblastic.
- 5) Hermaphrodite.
- 6) Pseudocoelom.
- 7) Setae.
- 8) Mantle.
- 9) Peripatus.
- 10) Aristotles' lantern.

**PART - B**

Answer any **Five** of the following

**II** a) Binomial nomenclature.

(2×5=10)

b) Classify phylum porifera with suitable examples.

[P.T.O.]







- III a) General Characters of Aschelminthes with suitable examples. (2×5=10)  
b) Cephalic Appendages of Prawn.
- IV a) Write the salient features of phylum Coelenterata with examples. (2×5=10)  
b) Sketch and label mouth parts of Butterfly.
- V a) Classify the phylum Echinodermata with suitable examples. (2×5=10)  
b) Describe the morphology of unio.
- VI Describe structure of sporozoite & explain the life cycle of plasmodium vivax in mosquito. (1×10=10)
- VII Explain digestive system of Earthworm (Pheretima postuma) (1×10=10)
- VIII Describe the general characters of phylum Platyhelminthes & Classify with suitable examples. (1×10=10)
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27125(New)

B.Sc. I Semester Degree Examination, Oct./Nov. - 2019

ZOOLOGY

BIOLOGY OF NON CHORDATA

PAPER-Z-1.1

(NEW)

Time : 3 Hours

Maximum Marks :60

*Instructions to Candidates:*

- 1) Answer should be specific to the questions
- 2) Draw neat labelled diagram wherever necessary.

PART - A

I. Answer the following

(10×1=10)

1. Species.
2. Sporogony
3. Gemmules
4. Flame cells
5. Pedicellaria
6. Osphradium
7. Haemocoel
8. Cnidoblast
9. Spermatheca
10. Syncytial epidermis.

[P.T.O.]







## PART - B

Answer any five

- II. a) Five kingdom of animal classification. (2×5=10)  
b) Classify protozoa with distinctive characters of class and examples.
- III. a) Describe nervous system of Earthworm. (2×5=10)  
b) General characters of Aschelminthes with suitable examples.
- IV. a) Sketch and label mouth parts of cockroach. (2×5=10)  
b) Ophiopluteus larva.
- V. a) Trematoda and Cestoda. (2×5=10)  
b) Describe general characters of porifera with suitable examples.
- VI. Explain canal system in sponges. (1×10=10)
- VII. Explain digestive system of Unio. (1×10=10)
- VIII. Explain life cycle of hydra. (1×10=10)





27125(New)

B.Sc. I Semester Degree Examination, Oct./Nov. - 2018

**ZOOLOGY**

**Biology of Nonchordates**

**Paper - Z - 1.1**

**(New)**

Time : 3 Hours

Maximum Marks : 60

**Instructions to Candidates:**

- 1) Answer should be specific to the questions.
- 2) Draw neat labelled diagram wherever necessary.

**PART - A**

**I. Answer the following.**

**(10×1=10)**

1. Genus
2. Signet ring stage.
3. Bilateral symmetry.
4. Spongocoel
5. Planula larva
6. Flame cells
7. Setae
8. Omnivorous
9. Lines of growth.
10. Tube feet.

**PART - B**

Answer any **FIVE** of the following.

**II. a) Trinomial system of Nomenclature.**

**(2×5=10)**

**b) Ascon and sycon type of canal system.**

**III. a) Life cycle of Plasmodium Vivax in mosquito.**

**(2×5=10)**

**b) General characters of Phylum Coelentrata.**

**[P.T.O.]**







- IV. a) Maxillipedes of Prawn. (2×5=10)  
b) General characters of Phylum Aschelminthes.
- V. a) Classify Echinodermata with suitable examples. (2×5=10)  
b) Sketch and label mouthparts of Butterfly.
- VI. Explain digestive system of Earthworm. (1×10=10)
- VII. Describe Parasitic adaptations in Helminthes. (1×10=10)
- VIII. Explain general characters of phylum Mollusca and classify it up to class with suitable examples. (1×10=10)
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**B.Sc. I Semester Degree Examination, Nov./Dec. - 2017**

**ZOOLOGY**

**Paper - 1.1 : Biology of Non-Chordata**

Time : 3 Hours

Maximum Marks : 80

***Instructions to Candidates :***

- 1) Answer Should be specific to the questions.
- 2) Draw neat labelled diagram wherever necessary.

**I. Answer any 10 of the following :**

**(10 × 2 = 20)**

1. Excystation.
2. Encysted Microfilaria
3. Trematoda
4. Calcaria
5. Flame Cells
6. Aedes aegypti
7. Pedicellariae
8. Nomenclature
9. Polyp
10. Multiple Fission
11. Radial Symmetry
12. Mantle

**[Condt.]**





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**II. Answer any Four of the following :**

**(5 × 4 = 20)**

13. Classify the phylum Coelenterata with example.
14. Salient features of phylum Annelida.
15. Define diversity, write a note on ecological diversity.
16. Parasitic adaptation of Hookworm.
17. Life cycle of entamoeba histolytica.
18. Mention the salient features of Holothuroidea and crinoidea.

**III. Answer any Four of the following :**

**(4 × 10 = 40)**

19. Write the general characters and classification of phylum Arthropoda upto classes with examples.
20. Structure of starfish with neat labelled diagram.
21. Canal system in Sponges.
22. Life cycle of Taenia solium.
23. Digestive system of Unio with neat labelled diagram.
24. General characters and classification of phylum protozoa upto classes with examples.







95514

NEP  
I Semester Open Elective Degree Examination, March/April 2022  
ZOOLOGY  
Economic Zoology

Time : 3 Hours

Max. Marks : 60

**Instructions :** Part - A : All questions are compulsory.  
Part - B : Answer any five full questions.  
Draw neat labelled diagram wherever necessary.

PART - A

1. Answer the following :
- a) Apis florea
  - b) Reeling
  - c) Ghee
  - d) Nutritive value of egg
  - e) Scope of aquaculture
  - f) Aquarium plants
  - g) Vermicompost
  - h) Lac composition
  - i) Tasar silkworm
  - j) Paneer and butter.

(10×1=10)

PART - B

Answer any five of the following :

(5×10=50)

- 2. a) Explain life cycle of apis indica. 10
- b) Write a note on mulberry cultivation.
- 3. a) Explain housing system of dairy animals. 10
- b) Write a brief account on deep litter system in poultry rearing.

P.T.O.





95514



4. a) Write a note on different types of aquaculture ponds. 10  
b) Write a note on Indian Major Carps. 10
5. a) Describe preservation and processing of prawn. 10  
b) Write a note on small scale vermiculture. 10
6. a) Describe briefly about life cycle of lac insect. 10  
b) Write a note on shrimp culture. 10
7. a) Write a note on diseases of Honey Bee. 10  
b) Write a note on diseases and pests of earthworm. 10
8. a) Write a note on composition and uses of honey. 10  
b) Describe construction of home aquarium. 10