

S.Y.B.Sc Sem III Regular Exam October 2023
Zoology Paper-II

VCD: 28/10/23

Hour: 03 Hours

Marks: 100

- Note: 1) All questions are compulsory
2) Figure to the right indicate marks.
3) Draw suitable diagrams wherever necessary.

Q.1.A. Fill in the blanks

Marks 05

- 1) In sponges internal buds called _____ are formed.
(sperm, gemmules, fragments, wings)
- 2) _____ is present in Anabas as accessory respiratory organ.
(Labyrinthine organ, Book lungs, Feathers, Organ of Bojanus)
- 3) The locomotory organ in amoeba is _____.
(fins, cilia, tube feet, pseudopodia)
- 4) Gastro vascular cavity is present in _____.
(amoeba, hydra, bivalve, fish)
- 5) The foramen of Panizza is present in heart of _____.
(crocodile, cockroach, earthworm, frog)

Q.1.B. Match the following.

Marks 05

- | | |
|---------------------|------------------|
| 1. Ruminant Stomach | a. Amoeba |
| 2. Oviparity | b. Insect |
| 3. Pseudopodia | c. Cow |
| 4. Hemolymph | d. Filter feeder |
| 5. Bivalve | e. Birds |

Q.1.C. True or False.

Marks 05

1. Gills are present in humans.
2. Cilia is the locomotory organ in paramoecium.
3. Cockroach has closed circulation.
4. Nephridia is present in earthworm
5. Spermatogenesis means formation of sperm.

Q.1.D. Answer in one sentence

Marks 05

1. Define Synapse
2. Define Heterotrophic
3. What are Ammonotelic animals?
4. Define Viviparity
5. What is a gizzard?

Q.2. Answer the Following (Any two)

Marks 20

1. Explain in detail physiology of digestion in man.
2. Describe the animals on the bases of principle nitrogenous excretory products.
3. Illustrate with a help of diagram Ruminant stomach.
4. Discuss in detail physiology of urine formation in man.

Q.3. Answer the Following (Any two)

Marks 20

1. With the help of a suitable diagram explain heart of man
2. Explain the structure of air sacs in Pigeon
3. Describe the physiology of respiration in man.
4. Explain the types of circulating fluids present in animals with suitable examples.

Q.4. Answer the Following (Any two)

Marks 20

1. Illustrate in detail Oogenesis and add a note on structure of human egg.
2. Describe in detail giving examples asexual reproduction.
3. Explain feedback mechanism in hormone regulation giving suitable examples.
4. Describe Sol-Gel Theory in amoeboid movement.

Q.5. Write short notes on (Any four)

Marks 20

1. Types of fertilization
2. Book Lungs
3. Flame cells
4. Fins in fishes
5. Gills in bony fishes
6. Cutaneous respiration
7. Green glands.
8. Nerve net in Hydra