

Extra

Note:

Total Marks: 100

1. Figures at right indicates marks
2. All questions are compulsory
3. Draw diagrams wherever necessary.

Q1) Answer the following

A. Fill in the blanks

05 marks

- 1) In amoeba the food is captured by the _____.
a) pseudopodia b) lysosomes c) gastroderm d) cytoplasm
- 2) _____ convert the starch into glucose.
a) lipases b) glycerol c) proteolytic d) amylase
- 3) The central nervous system of earthworm consists of. -----
a) Segmental ganglion b) Nerve net c) Nerve fiber d) Nerve ring and nerve cord
- 4) The forewings in cockroach is also known as. -----
a) Patagium b) Setae c) Tegmina d) Cilia
- 5) Respiration in spider is through -----
a) Lungs b) Skin c) gills d) book lungs

B. True or False

05 marks

- 1) Response to Chemical stimuli is known as Chemotropism.
- 2) In cockroach excretion is carried out by the flame cells.
- 3) Earthworm breathes through skin.
- 4) Hydra has an incomplete digestive system.
- 5) Human heart has 3 chambers.

C. Match the column

05 marks

- | | |
|---------------------|---------------------|
| 1) Photoautotrophic | a) Metanephric |
| 2) Irritability | b) Open circulation |
| 3) Hydra | c) Euglena |
| 4) Cockroach | d) Paramecium |
| 5) Mammalian kidney | e) Nerve net |

D. Answer in one word.

05 marks

- 1) Name the excretory organ in crab.
- 2) Where are neurotransmitters present?
- 3) The organism which lives in association with other organism for mutual benefit.
- 4) Which type of accessory respiratory organs does cat fish have?
- 5) Which type of reproduction is observed in marine Sponges?

Q2) Answer the following (Any 2)

20 marks

- 1) Explain Ultrafiltration in man.

- 2) Classify animals based on the principle nitrogenous excretory products.
- 3) Describe in detail Ruminant stomach.
- 4) Describe the digestive system of Cockroach and add a note on T.S of gizzard.

Q3) Answer the following (Any 2)

20 marks

- 1) Describe the structure and mechanism of air sacs in Pigeon.
- 2) In detail explain the physiology of respiration in man.
- 3) Explain various types of accessory respiratory organs in fishes.
- 4) Describe various types of circulating fluids present in animals.

Q4) Answer the following

20 marks

- 1) Explain conduction of nerve impulse.
- 2) Classify and describe various types of fins in fishes.
- 3) Describe in detail asexual reproduction
- 4) Explain feedback mechanism of hormones regulation.

Q5) Short note (Any 4)

20 marks

- 1) Synapse
- 2) Food vacuole in Amoeba
- 3) Tube feet in Star fish
- 4) Malpighian tubules in Hydra
- 5) Septal Nephridia
- 6) Labyrinthine organ in Anabas.
- 7) Gemmule formation
- 8) Flame cells