



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions. (15x2=30)

- I. Describe the parathyroid gland.
- II. Differentiate between sensory and motor neuron.
- III. Describe the location and function of Photoreceptors.
- IV. Diagrammatically, only, differentiate the nervous organization of a cephalopod and a crustacean.
- V. Describe the lateral line system.
- VI. Draw a labelled diagram of cross section of spinal cord.
- VII. Describe in detail the sonar.
- VIII. With the help of labeled figures only, compare the heart and circulatory system of reptiles and mammals. Indicate the direction of blood flow.
- IX. Give four basic physiological principles of cutaneous gas exchange.
- X. Describe the properties of a respiratory exchange surface?
- XI. Compare the continuous and discontinuous feeders.
- XII. Discuss the structure and function of alveoli.
- XIII. Write a note on fate of proteins in heterotrophs.
- XIV. What is a gall bladder?
- XV. Describe the appendix.

Q.2. Answer the following questions. (3x10=30)

1. Give an account of the nerve impulse transmission mechanism in a neuron.
2. Discuss, very briefly, mode of actions of hormones.
3. Briefly discuss the diversity of digestive structures in invertebrates