



**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 location and function of phono receptors in invertebrates.
- 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 as well.
- IX. Give four basic physiological principles that apply to lung ventilation.
- X. Describe the complex camera eye?
- XI. Compare the structure and function of mitochondria and chloroplast.
- XII. Discuss the structure and function of Smooth endoplasmic reticulum.
- XIII. Write a note on structure and functions of adrenal cortex.
- XIV. Briefly describe the platelets.
- XV. Describe the appendix.

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

- I. Give an account of the nerve impulse transmission mechanism in a neuron.
- II. Discuss, very briefly, hormonal control of female reproductive system.
- III. Account, in detail, the hormones of pituitary gland, in mammals.