

**B.P.T.H. 1st Year Supplementary Examination January – 2018**  
**HUMAN PHYSIOLOGY**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**Q. No. 1 Very short answer the question (50–60 words)  $2 \times 10 = 20$**

- a. Define sarcomere. Write normal length of sarcomere.
- b. Define homeostasis. Give two examples of homeostasis.
- c. Name different organelles of a cell.
- d. Write composition of blood.
- e. Define synapse. Write types of synapses.
- f. Define receptors. Give examples of receptors.
- g. Write functions of liver.
- h. Define cardiac output. Write its normal value.
- i. What is Tidal Volume? Write its normal range.
- j. Hormones of Adrenal Gland.

**Q. No. 2 Short Answer the question (250–500 words)  $10 \times 5 = 50$**

- a. Wallerian Degeneration
- b. Intrinsic Mechanism of blood coagulation
- c. Cell Mediated Immunity
- d. Functions of Cerebellum
- e. How oxygen is transported in body

**Q. No. 3 Essay type question any two (450–500 words)  $15 \times 2 = 30$**

- a. Describe mechanism of skeletal muscle contraction.
- b. Name hormones of thyroid gland. Describe physiological actions of hormones of thyroid gland.
- c. Structures and properties of cardiac muscle.