

B.Sc. F.Y. (CBCS Pattern) Semester - I
USBCT-C01 - Biochemistry Paper-I (Human Physiology)

P. Pages : 2

Time : Three Hours



GUG/S/23/11540

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw diagrams wherever necessary.

1. Describe the intrinsic mechanism of blood coagulation. **10**

OR

- a) Write short notes on Plasma Proteins. **2½**
- b) Describe the structure and functions of Hemoglobin. **2½**
- c) Write a note on Bohr's Effect. **2½**
- d) Describe the role of vitamin K in blood clotting. **2½**

2. Describe in detail digestion and absorption of proteins in the alimentary canal. **10**

OR

- a) Briefly describe different types of muscle fibres. **2½**
- b) Describe intestinal absorption of Carbohydrates. **2½**
- c) Draw a well labelled diagram of neuromuscular junction. **2½**
- d) Describe the structure of a Myofibril. **2½**

3. Explain the mechanism of Conduction of nerve impulse along myelinated and non-myelinated nerve fibers. **10**

OR

- a) Write a note on Menstrual cycle. **2½**
- b) Describe functions of female sex hormones. **2½**
- c) Describe in brief HCG and its functions. **2½**
- d) Write a note on Oogenesis. **2½**

4. Describe the mechanism of action of peptide hormones using cAMP as second messenger. **10**

OR

- a) What are hormones? How are hormones classified? **2½**

- b) Write a note on functions of thyroid hormones. 2½
- c) Name the hormones secreted by pituitary gland and describe one function of each hormone. 2½
- d) Write a note on Pancreatic hormones. 2½

5. Attempt **any ten** of the following. 10

- a) Write the name of the hormones secreted by parathyroid.
- b) Name the Tissue which secretes progesterone.
- c) Name two types of cells present in juxtaglomerular apparatus.
- d) Mention one function of platelets.
- e) What is Bohr's effect.
- f) What is oxygenated form of hemoglobin?
- g) Differentiate between myelinated and non-myelinated neurons.
- h) Write is refractory period.
- i) What do you mean by sensory neuron.
- j) Which endocrine gland is involved in regulation of blood glucose level.
- k) Name any two hormones of adrenal gland.
- l) Parafollicular cells of thyroid Secrete ----- Hormone.
