

Bachelor of Science (F.Y.B.Sc.) (Part-I) First Semester (Old)
001 – Biochemistry-I Paper-I (Human Physiology)

P. Pages : 2

Time : Three Hours



GUG/W/18/1198

Max. Marks : 50

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

1. Describe in detail Mechanism of transport of O₂ by blood. **10**

OR

Give a detail account of transmission of impulse through the synapse. **10**

2. Describe in detail Active & Passive transport. **10**

OR

Explain in detail menstrual cycle. **10**

3. a) Enlist the functions of platelets. **2½**

b) Write a note on "All or none law" & "Refractory Period". **2½**

c) Draw a well diagram of neuromuscular junction. **2½**

d) Describe Oogenesis. **2½**

OR

e) Explain how kidney regulate acid-base balance. **2½**

f) Describe absorption of fats. **2½**

g) Write a note on membrane composition. **2½**

h) Write in brief about HCG & its functions. **2½**

4. a) Briefly describe Bohr's effect. **2½**

b) Describe gastric digestion of carbohydrates. **2½**

c) Write in brief Na⁺ – K⁺ pump. **2½**

d) Describe cAMP as secondary messenger. **2½**

OR

- e) Describe Juxtaglomerular apparatus. 2½
- f) Draw a well labelled diagram of a multipolar neuron. 2½
- g) Write in brief about fluid mosaic model. 2½
- h) Give the list of hormones secreted by pituitary with its function. 2½

5. Attempt **any ten** from following.

- a) Define Chloride shift. 1
- b) Give any two functions of monocytes. 1
- c) Draw the structure of nephron. 1
- d) Define membrane potential. 1
- e) What is nerve impulse? 1
- f) Name any two enzyme responsible for digestion of proteins. 1
- g) Draw Calcium pump. 1
- h) Define 'Z' line in muscle structure. 1
- i) Which ion play important in sliding mechanism of muscle contraction? 1
- j) Give any two functions of thyroid gland. 1
- k) Give the function of glycogen. 1
- l) Give the name of any six hormones. 1
