

[LF 121]

OCTOBER 2014

Sub. Code: 2018

**M.D. DEGREE EXAMINATION
BRANCH V – PHYSIOLOGY**

**PAPER I – GENERAL PHYSIOLOGY, BLOOD, DIGESTION, AND
TISSUES OF THE BODY**

Q.P. Code :202018

Time : Three Hours

Maximum : 100 marks

I. Essay:

(2 x 10 = 20)

1. Discuss the different mechanisms of active transport across the cell membrane. How are these applied in the management of disease conditions?
2. Explain how the various small intestinal movements are regulated.

II. Short Questions:

(8 x 5 = 40)

1. Patch clamp.
2. Cell Adhesion Molecules.
3. Plasminogen system.
4. Clinical importance of blood group system.
5. Neuromuscular junction.
6. Length Tension relationship in skeletal muscle.
7. Immunological memory.
8. Molecular Motors.

III. Reasoning Out:

(4 x 5 = 20)

1. Neutropenia occurs in Enteric fever.
2. Trained athletes are able to increase the oxygen consumption of their muscles to a greater degree than untrained individuals.
3. Why does a clean straight line cut with a knife bleed longer than an irregular injury caused by a stone?
4. Albumin synthesis should be carefully regulated.

IV. Very Short Questions:

(10 x 2 = 20)

1. What is Haemochromatosis?
2. What are Mast cells?
3. Second Messengers.
4. Difference between Hunger and Appetite.
5. What is Gastro Salivary reflex?
6. Importance of Bile salts.
7. Structural Proteins.
8. Significance of Evan's Blue.
9. Define a sarcomere.
10. Define Refractory period.
