

17 OCT 2019  
10194

**FIRST BHMS (NEW SYLLABUS)**  
**Physiology and Biochemistry - Paper I**

**Time: - 3 Hrs.**

**100 Marks**

**Instructions:-** [1] All the Questions are compulsory.  
[2] Write the Both Sections in Separate answer Book.

[3] Draw Diagrams where ever Necessary.  
[4] Figures to the right indicate full Marks

**SECTION I**

- Q-1 Define stroke volume. It's normal value. Explain the factors regulating cardiac out put in detail. 15
- OR**
- Q-1 Define Erythropoiésis. Site of erythropoiesis. Described stages of erythropoiesis in detail. 15
- Q-2 Which are properties of cardiac muscle? Described in detail each one. 15
- OR**
- Q-2 1. Immunoglobulin(Definition, composition, parts & classification) 08  
2. Diastolic event of cardiac cycle. 07
- Q-3 Write Short Note ( Any three) 15
- (a) Lymph node (b) ECG Leads  
(c) Difference between DNA & RNA (d) Osmosis  
(e) Platelets plug
- Q-4 Write short questions. 05
1. What is pulse pressure?
  2. What is function of endoplasmic Reticulum ?
  3. Define diffusion
  4. What do you mean by Rh incompatibility?
  5. Give two difference between HBA & HBF.

**Section - II**

- Q-1 Describe the transport of carbon dioxide from tissue cells to lungs. 15
- OR**
- Q-1 Describe mechanism of concentration and dilution of urine . 15
- Q-2 Described structure of respiratory membrane, diffusion capacity and mecha of exchange of gases between alveoli and blood. 15
- OR**
- Q-2 1 Define pulmonary ventilation. Described pulmonary functions test in detail. 08  
2 Define nephron. Types of it's. Described histology of nephron in detail. 07
- Q-3 Write Short Note ( Any three) 15
- (a) Micturition reflex (b) Saltatory conduction  
(c) Lung compliance (d) Glands of skin  
(e) Bohr's effect
- Q-4 Write short questions. 05
1. What is dead space?
  2. Define sarcomere.
  3. Enumerate structure of JGA.
  4. What is vital capacity?
  5. Enumerate layers of Epidermis of skin.