



**J-0201852**

Seat No. \_\_\_\_\_

**First Year B. Physiotherapy Examination**

**July - 2019**

**Human Physiology & Biochemistry**

**(New Course)**

Time : 3 Hours]

[Total Marks : 80

**Instructions :**

1. Write each section in separate answer books.
2. Draw figure wherever necessary.
3. Figures on right indicate marks.
4. Attend all the question.

**SECTION - I (55 marks)**  
**(Physiology)**

- 1 Long answers : (any two) 20**
- (1) Define erythropoiesis. Describe various stages and factors affecting it.
  - (2) What is cardiac cycle? Describe events during cardiac cycle in detail.
  - (3) Functions of hypothalamus.
- 2 Write short notes : (any four) 20**
- (1) Spermatogenesis
  - (2) Functions of pancreatic juice
  - (3) Juxtaglomerular apparatus
  - (4) Lung compliance
  - (5) Errors of refraction.
- 3 Write short answers : (any five) 15**
- (1) What is jaundice ? Enumerate it's type.
  - (2) Difference between Isotonic and Isometric contraction.
  - (3) Enumerates factors affecting arterial blood pressure.
  - (4) Physiological causes of Neutrophilia.
  - (5) Enumerate contraceptive methods in female.
  - (6) Difference between Upper motor neuron paralysis and lower motor neuron paralysis.

**SECTION - II (25 marks)**  
**(Biochemistry)**

- 4** Long answer : (any one out of two) **1×10=10**
- 1) Lipoproteins and their Clinical Significance.
  - 2) Diabetes Mellitus : Clinical Features, Diagnosis, Treatment and Complications.
- 5** Short answer : (any one out of two) **1×5=5**
- 1) Phenylketonuria
  - 2) Regulation of Blood Calcium Level.
- 6** Very short answer : (any 05 out of 06) **5×2=10**
- 1) Examples of Cardiac Biomarkers
  - 2) Functions of Vitamin C
  - 3) Sickle Cell Anemia
  - 4) Functions of Phospholipids
  - 5) Risk Factors of Atherosclerosis
  - 6) Structural Organization of Proteins.
-