

Total No. of Questions : 6]

SEAT No :

P1969

[5145]-105

[Total No. of Pages :2

First Year B.Pharmacy

**1.1.5: HUMAN ANATOMY & PHYSIOLOGY-I
(2013 Pattern) (Semester-I)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Answers to the two sections should be written in separate answer books.*
- 3) *Neat labeled diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*

SECTION-I

Q1) Classify and explain different types of muscle tissues with their properties and functions. Discuss in detail anatomy & physiology of skeletal muscles.[10]

OR

Discuss in detail anatomy, physiology & life cycle of erythrocytes.

Q2) Answer the following (Any 5): **[15]**

- a) Explain the structure and functions of cytoskeleton.
- b) Describe the structure and functions of endoplasmic reticulum.
- c) Add an account on thrombocytes.
- d) Explain the composition and functions of blood.
- e) Explain events of interphase of cell division.
- f) Define the terms Anemia, Polycythemia and Inflammation.
- g) Explain the components of feedback system.

Q3) Write short note on (Any 2): **[10]**

- a) Transport across plasma membrane.
- b) Platelet plug formation.
- c) Protein synthesis.
- d) WBCs.

P.T.O.

SECTION-II

Q4) Explain composition, formation and circulation of lymph. Add note on spleen. **[10]**

OR

Draw neat labeled diagram of digestive system. Explain in detail location, anatomy, histology and functions of small intestine.

Q5) Answer the following (any 5): **[15]**

- a) Write a note on AV valves.
- b) Discuss the role of baroreceptors in regulation of blood pressure.
- c) Describe the structure of salivary glands.
- d) Explain structure of lymph node.
- e) Discuss conduction system of heart.
- f) Define the terms hypertension, myocardial infarction and congestive heart failure.
- g) Explain the structure and functions of liver.

Q6) Write short note on (Any 2): **[10]**

- a) Renin-angiotensin-aldosterone system.
- b) Structure of Blood vessels.
- c) Stomach: Anatomy, Histology and functions.
- d) Electro-cardiogram (ECG).

