

**UKA TARSADIA UNIVERSITY**

**B. Pharm Sem-I Examination**

**Subject: 030020104 – Principle of Human Anatomy Physiology I**

**Duration: 3 Hours**

**Max. Marks: 70**

**Date:**

**Time:**

**Instructions:**

1. Attempt all questions.
2. Write each section in a separate answer book.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.
5. Draw diagrams/figures whenever necessary.

**Section-1**

**Q-1 (A) Do as directed [07]**

- I) What are plasma proteins?
- II) What do you mean by muscle contraction?
- III) Define Thrombocytopenia
- IV) Enumerate different types of Joints.
- V) Enlist three types of muscular tissues
- VI) Write Universal donor and Universal recipient blood group.
- VII) Define Pinocytosis.

**Q-1 (B) Answer the following in brief: (any 4) [08]**

- I) Give function of Golgi apparatus
- II) Draw the labeled diagram of cell
- III) Write in short about composition of blood.

IV) Explain briefly active transport.

V) Differentiate the following: Bone and Cartilage

VI) Explain in short the role of neutrophils in process of phagocytosis.

**Q-2 Answer the following [10]**

A) Explain mechanism of Blood clotting.

OR

A) Explain the structure and functions of Cell membrane and Nucleus

B) Describe the development of Bone. Explain how bone growth is regulated.

OR

B) Classify WBCs. Discuss functions of WBCs.

**Q-3 Answer the following in detail: (any 2) [10]**

A) Write a note on Blood group and its significance

B) Describe the structures and functions of synovial joints.

C) Describe the mechanism of protein synthesis by cell Organelles

## Section-2

**Q-1 (A) Do as directed [07]**

I) What do you mean by Refractory period?

II) Enumerate three pairs of major salivary glands.

III) What is Lymphocyte?

IV) Define Gastritis.

V) Write normal blood pressure of the human body.

VI) Define Cardiac output.

VII) Define AIDS.

**Q-1 (B) Answer the following in brief: (any 4) [08]**

I) Draw a labeled diagram showing internal structure of heart.

II) Discuss the functions of stomach.

III) Explain the following terms : (1) Arrhythmia (2) Atherosclerosis

IV) Explain in brief the Reticulo-endothelial System

V) Write about secretions of Pancreas.

VI) Define the following: (1) Lymphoma (2) Lymphosarcoma

**Q-2 Answer the following [10]**

A) Describe the Rennin -Angiotensin System and its Significance

OR

A) Write composition and functions of Lymph.

B) With a neat diagram explain the structure and functions of Liver.

OR

B) What is immunity? Describe the role of T-lymphocyte in immunity

**Q-3 Answer the following in detail: (any 2) [10]**

A) Explain in detail the process of Digestion.

B) Discuss Cardiac cycle with the help of suitable diagrams.

C) Define Blood Pressure? Discuss the factors affecting Blood Pressure.

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