

UKA TARSADIA UNIVERSITY
B.Pharm. First Semester Examination
030020106 Human Anatomy Physiology and Health Education- I

Max marks:70

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] Give functions of followings. [07]

- | | | |
|-----------------|-----------------------------------|-----------------------|
| I] Mitochondria | II] Erythropoietin | III] Actin and myosin |
| IV] Centromere | V] Sarcoplasmic reticulum | |
| VI] Haemoglobin | VII] Smooth endoplasmic reticulum | |

[B] Describe in brief. (Any four) [08]

- I] Disorder of joints
- II] Disorder of haemoglobin
- III] Platelets
- IV] Various movements of joints
- V] Vesicle mediated transport
- VI] Structure cell membrane
- VII] Composition of blood

Q.2 Write short notes. [10]

A] Enlist the various phases of Cell cycle? Explain in detail Mitotic phase

OR

A] Write note on Nervous tissue

B] Write note on Plasma protein

OR

A] Define Connective tissue. Explain Characteristics of each type.

Q.3 Describe in detail (Any two) [10]

- A] Physiological properties of muscle
- B] Classify joints and write a detail note on Synovial Joint.
- C] Hemopoiesis

Section-2

Q-4 (A) Do as directed:

[07]

- I) Define cardiac output
- II) What is pulmonary circulation?
- III) Explain pathway for Lymph circulation in the body
- IV) Enumerate organs involved in digestive system
- VI) Name artery carrying deoxygenated blood
- VII) Name the veins that enter the right atrium

(B) Answer the following in brief: (Any 4)

[08]

- I) Explain how a vaccine provides protective immunity in terms of first and second exposures to a pathogen.
- II) Differentiate between Artery and Vein
- III) What is the role of thymus in immunity?
- IV) Describe the location of the spleen and explain its functions.
- VI) Enumerate functions of liver

Q-5 Answer the following:

[10]

- A) Discuss the factors affecting stroke volume

OR

- A) Describe in detail various phases of Digestion.
- B) Describe the mechanism of blood coagulation

OR

- B) Enlist the endocrine secretions of pancreas and describe the function of insulin.

Q-6 Answer the following in detail. (Any 2)

[10]

- A) What is B.P.? Explain the factors affecting B.P.
- B) What is immunity? Differentiate the active and passive immunity.
- C) Draw a labeled diagram of heart. Define cardiac output and enlist factor affecting it