

# HUMAN ANATOMY & PHYSIOLOGY-I

**Time: 3 hours****Max. Marks: 70**

Question Paper Consists of **Part-A** and **Part-B**  
 Answering the question in **Part-A** is Compulsory,  
 Three Questions should be answered from **Part-B**

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## PART-A

- 1.(i) Classify leukocytes and enlist their functions.
- (ii) Write a note on respiratory volumes.
- (iii) Classify various types of connective tissues with examples.
- (iv) Draw a neat labeled diagram of heart.
- (v) Discuss the importance of water and electrolyte balance.
- (vi) Write a note on composition and functions of bile.

 $[4+3+4+4+4+3]$ 

## PART –B

2. (a) Write the mechanism of contraction of skeletal muscle.
- (b) Discuss the general features of synovial joints. Enumerate the nature and functions of synovial fluid.

[8+8]

3. (a) Write a note on blood clotting mechanism.  
(b) Describe the erythropoiesis and mention the factors regulating erythropoiesis.

[6+10]

4. Write a short note on following.
- (a) Congestive heart failure
  - (b) Electrocardiogram
  - (c) Blood pressure regulation
  - (d) **T** and **B** lymphocytes.

 $[2+5+5+4]$ 

5. (a) Explain the mechanism of respiration.  
(b) Write a note on the regulation of respiration.

[8+8]

6. (a) Explain digestion of foods in small intestine.  
(b) Describe the structure and functions of liver.

[8+8]

7. (a) Explain in detail about Renin –Angiotensin- Aldosterone (RAA) pathway.  
(b) Describe the histology of kidney with a neat labeled diagram.

[8+8]