**ADICHUNCHANAGIRI UNIVERSITY**

B.Pharm I Semester Examination – June 2019

**TIME: 3 Hours MAX.MARKS: 75 Marks**

**SUB: Human Anatomy & Physiology I**

**Q P Code: 11121**

**Instructions:** 1. Your answer should be specific to the questions asked**.**

2. Write Legibly**.**

3. Write the same question numbers as they appear in this question paper.

4. Draw neatly labelled diagrams wherever necessary.

# Long essays (Answer **any two**) **2X10=20**

1. Describe the structure of the cell and its components with their functions.
2. With the help of a neat labelled diagram, discuss the anatomy of the eyeball.
3. Describe the extrinsic and intrinsic pathways of blood-clotting cascade. Explain the principle underlying the blood group identification.

# Short essays (Answer **any seven**) **7X5=35**

1. List the various transport processes across the plasma membrane. Explain any two.
2. Define cell cycle. Explain the processes undergone by the cell during cell cycle.
3. Give structural classification of joints. Describe the structure of synovial joints.
4. Elaborate the functions of the skin.
5. Compare various types of white blood cells based on structure, function and staining method.
6. Discuss the formation and flow of lymph.
7. Compare and contrast between the two subdivisions of the autonomic nervous system.
8. Describe the cyclical bleaching and regeneration of photo pigments.
9. Draw a neat labelled diagram of normal ECG and explain the various waves and intervals.

Short answers (Answer **all** the questions) **10X2=20**

1. Enumerate the bones of lower limb.
2. What are desmosomes and where they are present in the body?
3. Enumerate the elementary tissues of the body with an example each.
4. Enumerate the reactions by which muscle fibres produce ATP.
5. Differentiate between thrombocytopenia and thrombocytosis.
6. Enumerate the primary and secondary lymphatic organs.
7. Which divisions of the autonomic nervous system cause miosis and mydriasis, respectively and explain how?
8. What is the role of the eustachian tube?
9. Define stroke volume and enumerate the factors that regulate it.
10. Define hypertension.

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