

ASTU

4-12-13 (Reg)

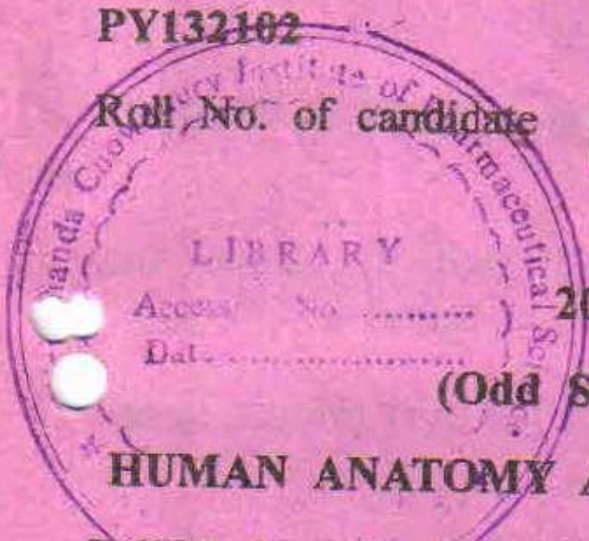
B.Ph. 1st Sem.

Total No. of printed pages = 5

PY132102

Roll No. of candidate

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2013

(Odd Semester)

**HUMAN ANATOMY AND PHYSIOLOGY - I**

Full Marks-100 Pass Marks-35 Time-Three hours

The figures in the margin indicate full marks for the questions.

Answer question numbers 1 and 6 and any six from the rest.

**SECTION - A**

1. (a) Fill in the blanks : 1×14=14

(i) \_\_\_\_\_ tissue is a vascular.

(ii) The site of ribosome formation is \_\_\_\_\_.

(iii) Adipocytes are the cells of \_\_\_\_\_ tissue.

(iv) A common disorder associated with low RBC count is called \_\_\_\_\_.

[Turn over

(v) In human face ——— numbers of bones are present.

(vi) ——— cartilage is found in the pinna of the ear.

(vii) The point at which the Axon and Dendrites meet is called a ———.

(viii) ——— type of joints is present in the skull.

(ix) The thin myofilaments are composed of a complex protein called ———.

(x) Through ———, the spinal cord enters into the skull.

(xi) Serum = plasma - (—————).

(b) Answer the questions in brief sentences :

(i) Define the terms condyle and facet.

(ii) Name two carpal bones.

(iii) What is anticoagulant ?

2. (a) Define Tissue. Name the various types of tissue.

(b) Describe the different types connective tissue in details. 2+10=12

3. (a) What are the normal stages of development of an erythrocyte ? What substances are required for this process ?  $4+2=6$
- (b) Discuss briefly about ABO blood grouping. 6
4. (a) Describe the bones present in pelvic girdle. 6
- (b) What do you mean by joint ? What are the different types of joint ? Describe the Synovial joint in details.  $2+4=6$
5. Write short notes on the following (any *three*):  $4 \times 3 = 12$
- (a) Cardiac tissue.
- (b) Mitochondria.
- (c) Congestive heart failure.
- (d) Physiology of muscle contraction.

#### SECTION - B

6. (a) Fill in the blanks :  $1 \times 10 = 10$
- (i) The instrument used in measurement of blood pressure is \_\_\_\_\_.
- (ii) The spleen can act as reservoir for \_\_\_\_\_ cells.

(iii) \_\_\_\_\_ are cells which can engulf and digest or encapsulate foreign material, such as inert particles and microorganisms.

(iv) The spleen weighs about \_\_\_\_\_ g.

(v) The standard blood pressure is \_\_\_\_\_.

(vi) \_\_\_\_\_ node is responsible for the initiation of cardiac impulse ?

(vii) Pulmonary veins carry \_\_\_\_\_ blood from lung to heart.

(viii) The cause of second heart sound is — \_\_\_\_\_.

(ix) \_\_\_\_\_ blood group people are called universal donor.

(x) The inner lining of blood vessel is known as \_\_\_\_\_.

(b) Answer questions in brief sentences if necessary : 1×4=4

(i) Define cardiac output.

(ii) What are the different layers present in the heart ?

(iii) What do you mean by leukocytosis and leucopenia ?

(iv) Name the largest vein in our body.

7. (a) Describe the structure of heart.  
(b) Write a note on regulation of blood pressure.  $6+6=12$
8. (a) What is lymph ? Write details about the composition and formulation of lymph. Write the functions of lymph.  $1+4+2=7$   
(b) Describe the structure and functions of Spleen.  $2+3=5$
9. (a) Describe the various events with respective time in a cardiac cycle. 8  
(b) Write a short note on ECG. 4
10. Write short notes (any *three*) :  $3 \times 4 = 12$   
(a) Physiology of heart Conduction.  
(b) Structure and function of lymph node.  
(c) Hypertension and Hypotension.  
(d) Lymphatic disorders.