

Sem - I CBSE

APP

CBSE

March 15

QP Code : 13461

(3 Hours)

[ Total Marks :70

- N.B. : (1) All Question are compulsory.  
(2) Figures to the right indicate full marks.  
(3) Draw a neat labelled diagram wherever necessary.

1. (a) Answer the following:—

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- (i) Give the role of fibroblast & collagen in connective tissue.
- (ii) What is osmosis? What happens if RBC are placed in hypertonic soln.
- (iii) Describe in brief functions of blood as a regulator.
- (iv) What is blood transfusion reaction
- (v) What are tendons? Give it's role.
- (vi) State the functions of lymphatic system.

(b) Fill in the blanks.

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- (i) \_\_\_\_\_ is composed of two or more tissue.
- (ii) Ability of cardiac muscle to generate action potential by its own is called \_\_\_\_\_.
- (iii) The process by which the formed elements of blood developes is called \_\_\_\_\_.

2. (a) Answer any two of the following:—

8

- (i) Explain the process of haemoglobin synthesis.
- (ii) Describe the life cycle of RBC
- (iii) Define Hemostasis and explain the role of platelet in hemostasis.

(b) Match the pairs (any one)

3

(i)

Types of anemia	Cause
(1) Megaloblastic	(a) destruction of bone marrow
(2) pernicious	(b) deficiency of vitamine B12 & folic acid
(3) Thalassaemia	(c) deficient synthesis of Hamoglobin (d) excessive loss of RBC

(ii)

Cells	Functions
(1) Lymphocytes	(a) phagocytosis
(2) Eosinophil	(b) carries O <sub>2</sub>
(3) Monocytes	(c) mediate antigen antibody response (d) combat the effect of histamine in allergic reaction.

3. (a) Answer any **two** of the following:— 8
- (i) Explain the physiology of skeletal muscle contraction.
  - (ii) Draw a neat labelled diagram of sarcomere.
  - (iii) Write a note on smooth muscle.
- (b) Answer any **one** of the following:— 3
- (i) Differentiate between isotonic and isometric type of contraction.
  - (ii) What are the properties & functions of cardiac muscle.
4. (a) Answer any **one** of the following:— 4
- (i) Describe the process of formation and flow of lymph.
  - (ii) What are the primary and secondary Lymphatic organs? give the role of spleen in lymphatic system.
- (b) Write short note on any **one**:— 4
- (i) What are auto-immune diseases? describe the patho physiology of graves disease.
  - (ii) Explain different types of hypersensitivity reactions. 3
- (c) Answer any **one** of the following:—
- (i) Draw a neat labelled diagram of simple cuboidal epithelium? state its location and function.
  - (ii) Discuss adipose tissue as connective tissue.
5. (a) Answer any **one** of the following:— 4
- (i) Describe different types of vesicle transport.
  - (ii) Draw a neat labelled diagram of plasma membrane & Enlist the functions of plasma-membrane.
- (b) Answer any **one** of the following:— 4
- (i) Explain the various types of muscle contractions.
  - (ii) Draw a neat labelled diagram cardiac muscle. Explain the role of intercalated disc. 3
- (c) Answer any **one** of the following:—
- (i) Discuss the process of acute inflammation.
  - (ii) Describe the process of tissue repair.
6. (a) Answer any **one** of the following:— 8
- (i) Write a note on ABO group system.
  - (ii) Give the Role of B-lymphocytes & T.lymphocytes in Immunity.
  - (iii) Define blood & give its composition & functions.
- (b) Answer any **one** of the following:— 3
- (i) Describe the features of chronic inflammation.
  - (ii) Discuss the role of any **two**:—
    - (a) Macrophages
    - (b) Plasma cells
    - (c) Cytokines.

Sem - I

**Course:** Anatomy, Physiology and Pathophysiology - I.

**Q.P Code:** 13461

**Correction:**

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**Question no. 6** is read as answer the following **any two instead of any one**

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**Query Update time:** 07/04/2015 11:56PM