

B. Pharma / 1 Sem - I (CBSGS-KT)

4/4/16

APP-I

QP Code : 24924

(3 Hours)

[Total Marks : 70

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

1. (a) Answer the following :- 12
- Write down general features and functions of connective tissues.
 - Explain in brief principal of Osmosis
 - Enlist organs of lymphatic system and write major functions of lymphatic system.
 - Define : Isotonic contraction and Isometric contraction.
 - Enlist functions of Blood. Write down any one function in detail.
 - Give brief outline of process of tissue repair.
- (b) Fill in the blanks. 8
- _____ is site of aerobic cellular respiration reaction that produce most of a cell's ATP.
 - Several different chemical released by microbes and inflammed tissues attract phagocytes, a phenomenon called _____
 - The prolonged presence of _____ in cytosol provides for smooth muscle tone, a state of continued partial contraction.
2. (a) Answer any two of the following :- 8
- Enlist types of Immunity and add a note on Antibody-mediated immunity.
 - Define Hemostasis. Describe process of clotting of blood.
 - Explain process of Erythropoiesis. Write down functions of erythrocytes.
- (b) Write short note on any one. 3
- Pernicious anemia
 - Pathway of Hemoglobin synthesis
3. (a) Answer any two of the following :- 8
- Explain contraction and relaxation of Skeletal muscle fibers.
 - Describe the reactions by which muscle fibers produce ATP and Enlist factors that contributes to muscle fatigue.
 - Enlist types of skeletal muscle fiber and distinguish between any two skeletal muscle fiber.
- (b) Answer any one of the following :- 3
- How do smooth muscles differ from skeletal muscles.
 - Describe structural and functional characteristic of cardiac muscles.

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4. (a) Answer **any one** of the following :- 4
- (i) Discuss functions of lymphatic organs and tissues.
 - (ii) Draw neat labelled diagram of spleen, add a note on formation of Lymph.
- (b) Write short note on : **any one**. 4
- (i) Myasthenia Gravis
 - (ii) Types of Hypersensitivity reaction.
- (c) Answer **any one** of the following : 3
- (i) Discuss adipose tissue as connective tissue.
 - (ii) Describe process of repair and growth of cartilage.
5. (a) Answer **any one** of the following :- 4
- (i) Explain active transport with suitable example.
 - (ii) Draw neat labelled diagram of " Fluid-mosaic structure of plasma membrane", and write its functions.
- (b) Answer **any one** of the following :- 4
- (i) Add a note on Neuro-Muscular junction with neat labelled diagram.
 - (ii) Write down types of muscle contraction.
- (c) Answer **any one** of the following : 3
- (i) Explain vascular changes and chemotaxis during inflammation.
 - (ii) Explain various steps involved in the process of Tissue repair after vascular inflammation.
6. (a) Answer **any two** of the following :- 8
- (i) What is role of platelet in hemostasis and explain extrinsic pathway of coagulation .
 - (ii) Write a note on : Hemolytic Disorder in Neonates (HDN)
 - (iii) Explain role of B-lymphocytes and T- lymphocytes in immunity.
- (b) Answer **any one** of the following :- 3
- (i) Write down role of Histamine and prostaglandin in inflammation.
 - (ii) Explain in brief process of phagocytosis Enlist various cells involve in phagocytosis.