

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
  2. Figures to the right indicate full marks.
  3. Draw neat, labeled diagrams wherever necessary.

**Q.1** a) Answer the following.

**16**

- Justify –blood as a connective tissue
- Justify – Pseudostratified epithelium as epithelial tissue
- Justify – Bloodgroup AB is universal system.
- Justify – Skin as a part of immune system.
- State the difference between primary and secondary lymphatic organs.
- Define –negative feedback mechanism.
- Enlist the components of Blood plasma.
- Enlist types of muscular tissue

**04**

b) Answer the following :

- A healthy adult has about -----million red blood cells per microliter of blood.
- Leukemia is represented by abnormal production of -----
- A -----Is a region where communication occurs between two neurons, or between a neuron and a target cell.
- Name two types of adaptive immunity.

**Q.2** a) Answer **any two** of the following.

**08**

- Write a note on composition of blood and its functions.
- Describe the process blood coagulation.
- Discuss erythroblastosis fetalis.

b) Write a short note on **any one** of the following

**04**

- Leucopenia and Leukocytosis
- Anemia and its types

**Q.3** a) Answer **any two** of the following

**08**

- Give detailed account of skeletal muscle contraction
- Write a note on energy metabolism in skeletal muscle.
- Describe sliding filament mechanism of skeletal muscle contraction

b) Answer **any one** of the following

**04**

- Write a note on neuromuscular transmission
- Draw a neat, labeled diagram showing organization of skeletal muscle

**Q.4** a) Answer **any two** of the following.

- i. Draw a neat, labeled diagram of spleen. Discuss functions of spleen.
- ii. Discuss anatomy and functions of lymph node.

04

b) Write a short note on **any one** of the following

- i. Myasthenia Gravis
- ii. AIDS

04

c) Answer **any one** of the following

- i. Describe bone as a connective tissue, its classification and function.
- ii. Draw a neat labeled diagram of a neuron.

04

**Q.5** a) Answer **any one** of the following

- i. Discuss fluid mosaic model of plasma membrane
- ii. Explain active transport mechanism

04

b) Answer **any one** of the following

- i. What are different types of muscle contraction? Explain with the help of examples
- ii. Write a note on functions and properties of muscles.

04

c) Answer **any one** of the following.

- i. Describe the mechanisms involved in migration of WBC
- ii. Write a note on process of chronic inflammation.

04

**Q.6** a) Answer **any two** of the following

- i. Write a short note on synthesis of hemoglobin
- ii. Explain the process erythropoiesis in detail.
- iii. Explain different types of hypersensitivity reactions.

08

b) Answer **any one** of the following

- i. Describe the process of chemotaxis and its importance.
- ii. Discuss different cells involve in immune response.

04