

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Pharmacy Sem-I Examination January 2010****Subject code: 210001****Subject Name: APHE-I****Date: 01 / 01 / 2010****Time: 12.00 – 3.00 pm****Instructions:****Total Marks: 80**

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q.1** (a) Define: Cell. Describe the structure of Cell membrane with appropriate diagram. Give functions of Cell membrane. **06**  
 (b) Classify WBCs. Discuss functions of WBCs. **05**  
 (c) Write composition and functions of Lymph. **05**
- Q.2** (a) Define and classify Allergy. Discuss features of various types of Allergy. **06**  
 (b) Give functions of Liver. **05**  
 (c) Discuss different types of Synovial joints with appropriate examples for each type. **05**
- Q.3** (a) Differentiate between (i) Active and Passive transport **06**  
 (ii) Skeletal and Cardiac muscle  
 (b) Explain mechanism of Blood clotting. **05**  
 (c) Write about composition of bone and functions of skeleton. **05**
- Q.4** (a) Discuss functions of Blood. **06**  
 (b) Describe changes during different phases of cell cycle. Draw suitable diagrams. **05**  
 (c) Classify Eicosanoids. Write a note on Prostaglandins. **05**
- Q.5** (a) Explain “Protein synthesis” with suitable diagrams. **06**  
 (b) Categorize Immunity. Write about each category. **05**  
 (c) Describe basic mechanism of Inflammation. **05**
- Q. 6** (a) Give functions of followings: **06**  
 (i) Mitochondria (ii) Platelets (iii) Gastric juice  
 (b) Write biosynthesis of Serotonin (5-HT). What are the actions of 5-HT on blood vessels? **05**  
 (c) Describe structure of Neuron with a labeled diagram. Write about different types of Neuron. **05**
- Q.7** (a) Define the following terms: **06**  
 (i) Osteoporosis (ii) Inflammation (iii) Hemophilia  
 (iv) Tissue (v) Lymphosarcoma (iv) Cartilaginous joints  
 (b) Explain steps of Erythropoiesis. Give normal life span, shape and size of RBC. **05**  
 (c) Write about secretions of Pancreas. **05**

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