

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Pharmacy Sem-I Remedial examination March 2009****Subject code: 210001****Subject Name: Anatomy Physiology & Health Education****Date: 16 / 03 /2009****Time: 10:30am-1:30pm****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) Describe in detail Protein synthesis. **08**
- (b) Enumerate various clotting factors and explain in detail mechanism of coagulation. **08**
- Q.2**
- (a) Write a detailed note on physiology of Muscle contraction. **08**
- (b) What are the various phases of Cell cycle? Explain in detail Mitotic phase. **08**
- Q.3**
- (a) Differentiate the followings: **06**
- i. Active transport mechanism and Passive transport mechanism
  - ii. Cardiac muscle and Smooth muscle
  - iii. Active immunity and Passive immunity
- (b) Explain in detail life cycle of RBC. **06**
- (c) What are the functions of Liver? **04**
- Q.4**
- (a) Describe following terminologies: **06**
- i) Leukemia ii) Rheumatoid Arthritis iii) Jaundice iv) Homeostasis
- (b) Classify joints and write a detail note on Synovial Joint. **05**
- (c) Explain in detail structure of Cell Membrane. **05**
- Q.5**
- (a) Draw a labeled diagram of Neuron **04**
- (b) Describe in detail various phases of Digestion. **06**
- (c) Explain briefly role of various local Hormones in Inflammation and Allergy. **06**
- Q. 6** **Answer the following:** **16**
- a) Classify Epithelial tissues.
  - b) What is the composition of Pancreatic juice?
  - c) What is Phagocytosis?
  - d) Explain pathway for Lymph circulation in the body.
  - e) Describe briefly various types of Anemia.
  - f) Which are the different types of W.B.C.?
  - g) Which enzymes are involved in digestion of Carbohydrate in various parts of the digestive system?
  - h) What are functions of Adipose tissue?
- Q.7** Write short note on the following: (*Any four*) **16**
- (a) Neuromuscular junction
  - (b) Plasma proteins
  - (c) Histology of bone
  - (d) Spleen
  - (e) Mitochondria

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