

GUJARAT TECHNOLOGICAL UNIVERSITY**Diploma Pharmacy First Year Examination May 2010****Subject code: 410005****Subject Name: Human Anatomy and physiology****Date: 24 / 05 / 2010****Time: 11.00 am – 02.00 pm****Total Marks: 80****Instructions:**

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

- Q.1**
- (a) Define cell. Enumerate various cell organelles. Describe any two of them in detail. **05**
 - (b) Describe muscular tissue. **05**
 - (c) Discuss anatomy and physiology of Liver. **06**
- Q.2**
- (a) Discuss in detail thyroid gland. **05**
 - (b) Write a note on structural and functional unit of kidney. **05**
 - (c) Explain various disorders of eye. **06**
- Q.3**
- (a) Write functions of red blood cells and white blood cells. **05**
 - (b) Write a note on process of blood coagulation. **05**
 - (c) Describe internal structure of heart with labelled diagram. **06**
- Q.4**
- (a) Write a note on cerebrum. **05**
 - (b) Write about structure and functions of hypothalamus. **05**
 - (c) Explain factors controlling respiration. Discuss chemical control in detail. **06**
- Q.5**
- (a) Enumerate bones of skull with short description of each. **05**
 - (b) Write a note on lymph. **05**
 - (c) Draw a labeled diagram of male reproductive system describing any one organ in detail. **06**
- Q. 6**
- (a) Draw a labelled diagram of human ear. Add a note on middle ear. **05**
 - (b) Discuss arterial system of human body. **05**
 - (c) Enumerate sex hormones and write their functions. **06**
- Q.7**
- (a) Write about salivary glands and stomach. **05**
 - (b) Classify hormones. Add a note on hormone obtained from β -cells of islets of langerhans. **05**
 - (c) Define following terms : **06**
 1. ESR
 2. Anaemia
 3. Residual volume
 4. Blood pressure
 5. Dendrites
 6. Menstruation
