

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Pharm.D. Year – I • EXAMINATION – SUMMER-2024**

**Subject Code: 818801****Date: 20/05/2024****Subject Name: Human Anatomy and Physiology****Time: 10:30am to 01:30pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) Explain the following terms: **06**  
i. Anatomy            ii. Physiology        iii. Hematology  
iv. Homeostasis       v. Sagittal plane    vi. Hemostasis
- (b) Write in detail transport mechanism across the cell membrane. **04**
- (c) Classify tissue. Write a note on muscular tissue. **04**
- Q.2** (a) Write a note on: i. Fibrous joint    ii. Synovial joint **06**
- (b) Write functions of skeleton system. Enlist the bones of upper limb. **04**
- (c) Write structure and function of spleen. **04**
- Q.3** (a) Define blood. Write composition and functions of blood. **06**
- (b) Write a note on blood group. **04**
- (c) Write the characteristics and functions of platelets. **04**
- Q.4** (a) Define blood pressure. Write in details factors maintaining blood pressure. **06**
- (b) Draw neat and labelled diagram of internal structure of heart. **04**
- (c) Write a note on cranial nerves. **04**
- Q.5** (a) Write anatomy and physiology of thalamus and cerebrum. **06**
- (b) Comment: Athletic training improves muscle performance. **04**
- (c) Write mechanism and regulation of respiration. **04**
- Q. 6** (a) Write the physiology of urine formation. **06**
- (b) Write anatomy and physiology of pancreas. **04**
- (c) Write a note on : Contraceptive devices **04**
- Q.7** (a) Enlist the parts of digestive system. Write in detail anatomy and physiology of stomach. **06**
- (b) Draw neat and labelled diagram of human eye. **04**
- (c) Write in brief about the physiology of skeletal muscle contraction **04**

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