

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Pharmacy First Year Examination June 2009

Subject code: 410005

Subject Name: Human Anatomy & Physiology

Date: 26/06/2009

Time: 11:30am-2:30pm

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. Draw and label its diagram. Name the functions of nucleus, mitochondria and lysosome. **05**
 - (b) Define tissue. Classify it. Describe the functions of epithelial tissue. **05**
 - (c) Describe process of coagulation of blood. **06**
- Q.2**
- (a) Differentiate between : artery and vein **05**
 - (b) Define muscle. Classify muscle tissue. Describe the property of voluntary muscle. **05**
 - (c) Define neuron and nerve fibre. Describe the difference between afferent nerve and efferent nerve. **06**
- Q.3**
- (a) Draw and label internal structure of human heart. Describe pulmonary circulation. **06**
 - (b) Draw and label the diagram of lungs. Describe its functions. **05**
 - (c) Draw and label salivary glands. Describe its functions. **05**
- Q.4**
- (a) Draw and label diagram of stomach. Describe its functions. **05**
 - (b) Draw and label diagram of liver. Describe its functions. **05**
 - (c) Draw and label diagram of nephron. Describe the mechanism of urine formation. **06**
- Q.5**
- (a) Describe renin angiotensin system for blood pressure regulation in kidney. **05**
 - (b) Draw and label diagram of spinal cord. Describe its function. **05**
 - (c) Describe functions of cerebral cortex. **06**
- Q. 6**
- (a) Describe formation and functions of thyroid hormones. **06**
 - (b) Name the hormones secreted from anterior pituitary gland. Describe functions of growth hormone. **05**
 - (c) Define reflex action. Classify it. Give few examples of conditional and unconditional reflexes. **05**
- Q.7**
- (a) Draw and label eye ball. Describe the functions of eye. **06**
 - (b) Draw and label internal structures of ear. Describe its functions. **05**
 - (c) Describe the functions of testis. **05**
