

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARMACY – SEMESTER I • EXAMINATION – WINTER - 2016

Subject Code: 2210004**Date: 03/02/2017****Subject Name: Human Anatomy Physiology - I****Time: 10.30 AM – 01.30 PM****Total Marks: 80****Instructions:**

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

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| Q.1 | (a) Explain homeostasis mechanism with suitable example. | 06 |
| | (b) Define:
1. Cell 2. Tissue 3. Cytology 4. Lymph 5. Blood | 05 |
| | (c) Draw neat and labeled diagram of mitochondria. Explain mitochondria are power house of cell. | 05 |
| Q.2 | (a) Draw the neat and labeled diagram of cell. Explain lipid-protein bi-layer of cell. | 06 |
| | (b) Explain cell cycle in brief. Write significances of cell cycle. | 05 |
| | (c) Write short note on protein synthesis. | 05 |
| Q.3 | (a) Classify tissue. Explain Epithelial tissue in brief. | 06 |
| | (b) Draw neat labeled diagram of neuron. Explain types of neurons according to their functions. | 05 |
| | (c) Explain physiology of muscles contraction. | 05 |
| Q.4 | (a) Classify joints and explain synovial joints. | 06 |
| | (b) Write short note on life cycle of RBCs. | 05 |
| | (c) Explain ABO system of blood. | 05 |
| Q.5 | (a) Explain compositions, circulation and functions of lymph. | 06 |
| | (b) Draw neat and labeled diagram of heart. Classify valve of heart. | 05 |
| | (c) Write short note on ECG. | 05 |
| Q.6 | (a) Differentiate cellular and humoral immunity. | 06 |
| | (b) Draw neat and labeled diagram of liver. Write functions of liver. | 05 |
| | (c) Explain digestion of food in intestine. | 05 |
| Q.7 | (a) Enlist types of anemia. Explain hemophilias. | 06 |
| | (b) Give brief introductions of:
1. Angina pectoris 2. Myocardial ischemia 3. Congestive cardiac failure
4. Cardiac arrhythmias 5. Leukemia | 05 |
| | (c) Explain compositions of blood. | 05 |
