

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – I • EXAMINATION – SUMMER 2013

Subject Code: 210007**Date: 17-05-2013****Subject Name: Human Anatomy Physiology and Health Education-I****Time: 02.30 pm - 05.30 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) Describe physiology of muscle contraction. | 06 |
| | (b) Explain regulation of gastric secretion and motility. | 05 |
| | (c) Write note on basic physiology and functions of spleen. | 05 |
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| Q.2 | (a) What is anemia? Explain various anemia in detail. | 06 |
| | (b) Describe life cycle of erythrocytes. | 05 |
| | (c) Define immunity. Describe the role of B-lymphocyte in immunity. | 05 |
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| Q.3 | (a) Draw labeled diagram of heart and explain conduction of blood in heart. | 06 |
| | (b) Write functions of accessory organs of digestive system. | 05 |
| | (c) Define and classify tissues. Write note on nervous tissue. | 05 |
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| Q.4 | (a) What is hemostasis? Explain the mechanism of blood clotting. | 06 |
| | (b) Describe the structures and functions of synovial joints. | 05 |
| | (c) What is cardiac output? Describe the factors affecting cardiac output. | 05 |
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| Q.5 | (a) Classify Leucocyte. Give functions of leucocytes in detail. | 06 |
| | (b) Write note on transcription in protein synthesis. | 05 |
| | (c) Explain following terms:
(1) Rheumatoid arthritis (2) Haemophilia (3) Liver cirrhosis (4) Arrhythmia
(5) Leukemia | 05 |
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| Q. 6 | (a) Draw labeled diagram of cell. Describe composition and functions of plasma membrane. | 06 |
| | (b) Write note on blood group and its importance. | 05 |
| | (c) Define Homeostasis. Explain the negative feedback mechanism with example. | 05 |
| | | |
| Q. 7 | (a) Draw labeled diagram of digestive system. Give composition of gastric juice. | 06 |
| | (b) Differentiate :
(1) Acquired and innate immunity
(2) Skeletal and cardiac muscles | 05 |
| | (c) Write note on neuromuscular junction. | 05 |
