

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Pharm D – 1<sup>st</sup> Year • EXAMINATION – SUMMER • 2015**

**Subject Code: 818801****Date: 19-05-2015****Subject Name: Human Anatomy and Physiology****Time: 10.30 am – 01.30 pm****Total Marks: 70****Instructions:**

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

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|-------------|---|-----------|
| <b>Q.1</b>  | (a) Explain physiology of hearing   | <b>06</b> |
|             | (b) Write a note on respiratory volumes and capacities  | <b>04</b> |
|             | (c) Describe spermatogenesis process  | <b>04</b> |
| <b>Q.2</b>  | (a) Describe various waves of ECG   | <b>06</b> |
|             | (b) Explain the difference between Juxtamedullary and Cortical nephrons                                   | <b>04</b> |
|             | (c) Write a note on hypothalamus  | <b>04</b> |
| <b>Q.3</b>  | (a) Explain formation, circulation and reabsorption of cerebrospinal fluid.                               | <b>06</b> |
|             | (b) Describe physiological changes that occur during exercise.  | <b>04</b> |
|             | (c) Write a brief note on control of blood pressure and blood flow.                                       | <b>04</b> |
| <b>Q.4</b>  | (a) Classify joints and write about types of movements of joints  | <b>06</b> |
|             | (b) Explain terms: i) Gastroesophageal reflux disease ii) Hypoxia<br>iii) Lymphadenopathy iv) Homeostasis | <b>04</b> |
|             | (c) Write a note on Mitochondria  | <b>04</b> |
| <b>Q.5</b>  | (a) Explain the process of thyroid hormones production.   | <b>06</b> |
|             | (b) Draw a neat and labelled diagram of heart   | <b>04</b> |
|             | (c) Write a note on cranial nerves  | <b>04</b> |
| <b>Q. 6</b> | (a) Describe various phases of digestion  | <b>06</b> |
|             | (b) Describe epithelial tissue  | <b>04</b> |
|             | (c) Draw a detailed diagram of male reproductive system   | <b>04</b> |
| <b>Q.7</b>  | (a) Write a note on menstruation describing various events that occur in uterus and ovaries.              | <b>06</b> |
|             | (b) Write a note on erythropoiesis  | <b>04</b> |
|             | (c) Explain the neuromuscular junction  | <b>04</b> |

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