

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Pharm D – Year- I • EXAMINATION – SUMMER - 2022**

**Subject Code: 818801****Date: 19/07/2022****Subject Name: HUMAN ANATOMY & PHYSIOLOGY****Time: 10:30 AM TO 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)   | Draw neat & clean labeled diagram of female reproductive system. Discuss functions of testosterone. | <b>06</b> |
|             | (b)   | Write a short note on physiology of urine formation.  | <b>04</b> |
|             | (c)   | Discuss the role buffer system in Acid-base balance.  | <b>04</b> |
| <b>Q.2</b>  | (a)   | Explain fluid mosaic model of cell membrane.  | <b>06</b> |
|             | (b)   | Differentiate   | <b>04</b> |
|             | (i)   | Smooth muscle and Skeletal muscle.  |           |
|             | (ii)  | Active transport and Passive transport  |           |
|             | (c)   | Explain anatomy and physiology of Spleen.   | <b>04</b> |
| <b>Q.3</b>  | (a)   | How thyroxin is synthesized? Discuss functions of Thyroxin.   | <b>06</b> |
|             | (b)   | Draw neat & clean labeled diagram of Human eye-ball.  | <b>04</b> |
|             | (c)   | Write a note on reflex action.  | <b>04</b> |
| <b>Q.4</b>  | (a)   | Write a note Cardiac cycle.   | <b>06</b> |
|             | (b)   | What is cardiac output? Explain the factor affecting cardiac output.                                | <b>04</b> |
|             | (c)   | Write a note on erythropoiesis.   | <b>04</b> |
| <b>Q.5</b>  | (a)   | Write a note on drugs & athletics.  | <b>06</b> |
|             | (b)   | Explain physiology of muscle contraction.   | <b>04</b> |
|             | (c)   | Discuss functions of medulla-oblongata and cerebellum.  | <b>04</b> |
| <b>Q. 6</b> | (a)   | Explain physiology of organ which is responsible for metabolism.                                    | <b>06</b> |
|             | (b)   | Explain mechanism of gastric acid secretion.  | <b>04</b> |
|             | (c)   | Write a note on freely movable joints.  | <b>04</b> |
| <b>Q.7</b>  | (a)   | Define following terms.   | <b>06</b> |
|             | (i)   | Gout  |           |
|             | (ii)  | Leukemia  |           |
|             | (iii) | Hypoxia   |           |
|             | (iv)  | Constipation  |           |
|             | (v)   | Anemia  |           |
|             | (vi)  | Arrhythmia  |           |
|             | (b)   | Write a note on internal respiration.   | <b>04</b> |
|             | (c)   | Enlist various hormones secreted from Adrenal cortex. Discuss physiology of Mineralocorticoids.     | <b>04</b> |

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