

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 2 EXAMINATION – WINTER -2019**

**Subject Code: BP201TP****Date: 16-12-2019****Subject Name: Human Anatomy and Physiology II****Time: 10:30 AM TO 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.

|             |                                                                              |           |
|-------------|------------------------------------------------------------------------------|-----------|
| <b>Q.1</b>  | (a) Describe mechanism and regulation of respiration.                        | <b>06</b> |
|             | (b) Describe the importance of buffer system for acid-base balance.          | <b>05</b> |
|             | (c) Write a short note on CSF.                                               | <b>05</b> |
| <b>Q.2</b>  | (a) Draw a labeled diagram of human brain. Write functions of hypothalamus.  | <b>06</b> |
|             | (b) Define hormone. Classify endocrine glands and their hormones.            | <b>05</b> |
|             | (c) Write in details about pancreatic hormones.                              | <b>05</b> |
| <b>Q.3</b>  | (a) Discuss the various methods of artificial respiration and resuscitation. | <b>06</b> |
|             | (b) Describe the various phases of gastric secretion.                        | <b>05</b> |
|             | (c) Write a note on BMR.                                                     | <b>05</b> |
| <b>Q.4</b>  | (a) Describe the regulation and actions of anterior pituitary hormones.      | <b>06</b> |
|             | (b) Write physiology of thyroid hormone.                                     | <b>05</b> |
|             | (c) Write physiological actions of glucocorticosteroids.                     | <b>05</b> |
| <b>Q.5</b>  | (a) Describe various phases of menstrual cycle.                              | <b>06</b> |
|             | (b) Describe functions of testes in detail.                                  | <b>05</b> |
|             | (c) Write functions of human liver.                                          | <b>05</b> |
| <b>Q. 6</b> | (a) Write a note on protein synthesis.                                       | <b>06</b> |
|             | (b) Draw labeled diagram of male reproductive system.                        | <b>05</b> |
|             | (c) Describe the basis of autosomal inheritance.                             | <b>05</b> |
| <b>Q.7</b>  | (a) Discuss about the physiology of urine formation.                         | <b>06</b> |
|             | (b) Discuss the process of nerve action potential generation.                | <b>05</b> |
|             | (c) Draw a neat and labeled diagram of nephron. Write functions of kidney.   | <b>05</b> |

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