

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Ph. - SEMESTER- II • EXAMINATION – SUMMER -2022**

**Subject Code:BP201TP****Date: 01/09/2022****Subject Name: HUMAN ANATOMY AND PHYSIOLOGY II****Time: 10:30am to 01:30pm****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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|-------------|--|-----------|
| <b>Q.1</b>  | (a) Draw a labeled diagram of brain. Give the functions of hypothalamus.   | <b>06</b> |
|             | (b) Explain role of pancreatic hormones.   | <b>05</b> |
|             | (c) What is reflex action and explains its types.  | <b>05</b> |
| <b>Q.2</b>  | (a) Write about the Lung volumes.  | <b>06</b> |
|             | (b) Write a note on electroencephalogram.  | <b>05</b> |
|             | (c) Write short note on Spermatogenesis.   | <b>05</b> |
| <b>Q.3</b>  | (a) Explain structure and function of kidney.  | <b>06</b> |
|             | (b) Discuss generation and propagation of action potential of neuron with diagram.   | <b>05</b> |
|             | (c) Discuss physiological role of posterior pituitary hormones.  | <b>05</b> |
| <b>Q.4</b>  | (a) Explain the following terms:<br>1) Acromegaly    2) COPD                      3) Renal calculi<br>4) CSF            5) Diabetes mellitus    6) Infertility | <b>06</b> |
|             | (b) Write a note on Acid base imbalance.   | <b>05</b> |
|             | (c) Explain structure of DNA.  | <b>05</b> |
| <b>Q.5</b>  | (a) Discuss mechanism and regulations of respiration.  | <b>06</b> |
|             | (b) Draw neat labeled diagram of female reproductive system.   | <b>05</b> |
|             | (c) Explain role of RAS in kidney.   | <b>05</b> |
| <b>Q. 6</b> | (a) Describe the functions of the adrenal gland hormones.  | <b>06</b> |
|             | (b) What is menstruation? Write in detail about various phases of menstrual cycle.   | <b>05</b> |
|             | (c) Discuss the synthesis, control and release of thyroid hormones   | <b>05</b> |
| <b>Q.7</b>  | (a) Write the digestion of food in GIT.  | <b>06</b> |
|             | (b) Discuss various phases of gastric acid secretion.  | <b>05</b> |
|             | (c) Draw labeled diagram of digestive system.  | <b>05</b> |

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