

**GUJARAT TECHNOLOGICAL UNIVERSITY****Diploma Pharmacy – 1<sup>st</sup> Year Examination – OCTOBER 2012****Subject code: 410005****Date: 06-11-2012****Subject Name: Human Anatomy & Physiology****Time: 2:30 pm – 5:30 pm****Total Marks: 80****Instructions:**

1. Attempt all 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 and label diagram of internal structure of human heart.<br>Describe coronary circulation. | <b>06</b> |
|             | (b) | Draw and label diagram of respiratory system. Write a short note on respiratory muscles.       | <b>05</b> |
|             | (c) | Enumerate salivary glands. Add a note on its secretion.                                        | <b>05</b> |
| <b>Q.2</b>  | (a) | Describe anatomy and physiology of liver.                                                      | <b>06</b> |
|             | (b) | Draw label diagram of stomach. Describe its function.                                          | <b>05</b> |
|             | (c) | Write a short note on gall bladder.                                                            | <b>05</b> |
| <b>Q.3</b>  | (a) | Draw and label diagram of nephron. Describe physiology of urine formation.                     | <b>06</b> |
|             | (b) | Draw and label diagram of spinal cord. Write its functions.                                    | <b>05</b> |
|             | (c) | Describe functions of hypothalamus and medulla oblongata.                                      | <b>05</b> |
| <b>Q.4</b>  | (a) | Define anatomy and physiology. Draw a label diagram of cell.                                   | <b>06</b> |
|             | (b) | Define and classify tissues. Describe muscular tissue.                                         | <b>05</b> |
|             | (c) | Discuss general functions of blood.                                                            | <b>05</b> |
| <b>Q.5</b>  | (a) | Write a note on RBC. Discuss disorders of haemoglobin.                                         | <b>06</b> |
|             | (b) | Discuss types of WBC and write its functions.                                                  | <b>05</b> |
|             | (c) | Differentiate between artery and vein.                                                         | <b>05</b> |
| <b>Q. 6</b> | (a) | Name hormones secreted from pituitary gland. Add a note on posterior pituitary gland.          | <b>06</b> |
|             | (b) | Draw and label diagram of human ear. Describe its functions.                                   | <b>05</b> |
|             | (c) | Draw a labeled diagram of eye. Describe functions of retina.                                   | <b>05</b> |
| <b>Q.7</b>  | (a) | Draw labeled diagram of female reproductive system.<br>Write functions of oestrogen.           | <b>06</b> |
|             | (b) | Discuss the structure and functions of spleen.                                                 | <b>05</b> |
|             | (c) | Enumerate various types of joints. Write a note on synovial joint.                             | <b>05</b> |

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