

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY**

**Term-End Examination**

**December, 2010**

**BAHI-001 : BASIC HUMAN SCIENCES**

*Time : 3 hours*

*Maximum Marks : 70*

- Note :**
- PART - A contains 10 objective questions.*
  - PART - B contains 5 short answer questions.*
  - PART - C contains 6 short notes. Answer any four questions.*
  - PART - D contains 4 essay questions. Answer any three questions.*

**PART - A**

1. (a) Fill in the blanks : 1x10=10
- (i) Chemical formula of sodium carbonate is \_\_\_\_\_.
  - (ii) The temperature of waterbath is regulated at \_\_\_\_\_ °C.
  - (iii) Tetany is a disease due to decreased activity of \_\_\_\_\_.
  - (iv) Respiration is controlled by the centre \_\_\_\_\_.
  - (v) The nerve stimulation for gastric secretion is \_\_\_\_\_.

- (b) Indicate True or False of the following :
- (i) Always pour the water into acid while diluting.
  - (ii) While using analytical balance the weight should be added in ascending order of magnitude.
  - (iii) The air is more of oxygen and less of carbondioxide.
  - (iv) The normal rate of respiration in children is lower than adult.
  - (v) Tumour(s) of adrenal gland can lead to Cushing's disease.

**PART - B**

2. Write short answers on the following : **2x5=10**

- (a) Illumination of microscope.
- (b) What are the differences between photoelectric colorimeter and spectrophotometric colorimeter ?
- (c) Enzymes of pancreatic juice and their functions.
- (d) Factors governing the speed of centrifugation.
- (e) Urea formation.

**PART - C**

**3.** Answer *any four* short notes.

**5x4=20**

- (a) Magnification of a microscope
- (b) Water
- (c) Nephron
- (d) Hot air oven
- (e) Mitotic division of a cell.
- (f) Structure and functions of connective tissues.

## PART - D

4. Answer *any three* of the following : **10×3=30**
- (a) Explain cardiovascular system of human body with appropriate diagrams. **10**
  - (b) Describe the structure and functions of digestive system with suitable diagrams. **10**
  - (c) (i) Distinguish between disinfection and sterilization. **2**  
(ii) Describe the principle and procedure of autoclaving with a diagram. **8**
  - (d) (i) Define solutes and solutions. **2**  
(ii) Describe types and molarity of various solutions giving examples of each. **8**