

**B.Sc. IN MEDICAL LABORATORY
TECHNOLOGY (BMLT)**

Term-End Examination

June, 2016

00244

BAHI-001 : BASIC HUMAN SCIENCES

Time : 3 hours

Maximum Marks : 70

*Note : Part A contains ten objective questions. Part B contains five short answer questions. Attempt **all** the questions. Part C contains six short notes. Answer any **four** questions. Part D contains four essay questions. Answer any **three** questions.*

PART A

1. (a) Fill in the blanks. $5 \times 1 = 5$
- (i) Function of ribosomes in a cell is _____ .
 - (ii) The nerve involved in stimulating gastric secretion is _____ .
 - (iii) Chemical formula of sodium hydroxide is _____ .
 - (iv) 0.1 mL serum is diluted to 10 mL. The final dilution is _____ .
 - (v) In fluorescence microscope, _____ light is used to illuminate particle.

(b) Indicate *true* or *false* for the following : $5 \times 1 = 5$

- (i) The temperature in a freezer is -20°C .
- (ii) Valency of Barium is one.
- (iii) The physical balance usually weighs to the nearest $\frac{1}{10}$ gm.
- (iv) Four ventricles are present in the human brain.
- (v) Tetany is the disease due to decreased function of thyroid gland.



PART B

2. Write briefly about the following :

$5 \times 2 = 10$

- (a) Tyndallization
- (b) Factors that govern the speed of centrifugation
- (c) Antidiuretic hormone
- (d) Renal threshold
- (e) Functions of stomach

PART C

3. Write short notes on any *four* of the following : 4×5=20

- (a) Spectrophotometer
- (b) Dark field microscopy
- (c) Reticulo-endothelial system
- (d) Thyroid gland
- (e) Lungs
- (f) The groups of tissues

PART D

Answer any **three** of the following :

3×10=30

4. (a) Describe the structure of liver. 4
- (b) Explain the mechanism of production of bile pigments. 6
5. (a) What are the functions of the nervous system? 4
- (b) Describe the structure and functions of cerebrum. Draw the diagram of a neuron. 6
6. (a) Describe the methods of disinfection and sterilization. List the various chemicals used for disinfection. 4
- (b) Describe the principle and procedure of autoclaving with diagram. 6
7. (a) Define percent solutions. 2
- (b) Describe the method for the preparation of 10 gm% sodium chloride and 5% hydrochloric acid. 8
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