

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

**Term-End Examination 00789**

**June, 2013**

**BAHI-001 : BASIC HUMAN SCIENCES**

*Time : 3 hours*

*Maximum Marks : 70*

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- Note :** *PART-A contains ten objective questions.*  
*PART-B contains five short answer questions.*  
*PART-C contains six short notes, answer any four of them. .*  
*PART-D contains four essay questions, answer any three of them.*
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**PART - A**

1. (a) Fill in the blanks. **1x10=10**
- (i) An adult human skeleton has \_\_\_\_\_ bones in number.
- (ii) Valency of calcium is \_\_\_\_\_.
- (iii) The boiling point of water (in centigrade) at sea level is \_\_\_\_\_ °C.
- (iv) The valve between the left atrium and left ventricle of heart is called \_\_\_\_\_ valve.
- (v) The normal pulse rate for an average healthy man at rest is around \_\_\_\_\_ per minute.

- (b) Write *true* or *false* against the statement in your answer book :
- (i) The prostate is a female genitourinary system organ.
  - (ii) The human heart is a powerful pump made almost entirely of the muscle tissue.
  - (iii) Sterilization by autoclave is done using steam under pressure at 121°C for 15 minutes.
  - (iv) It is possible to survive with just one lung if the other one is damaged or diseased.
  - (v) Urea is a substance produced in the body as a result of breakdown of proteins and amino acids.

## PART - B

2. Write short answers of the following :  $2 \times 5 = 10$

- (a) Define osmosis . Give an application of osmosis in human body.
- (b) What is a hormone ? Give an example of a male hormone.
- (c) Expand the term RNA. What is its significance ?
- (d) Use of X-rays in diagnostic laboratory.
- (e) What is a vitamin ? Give an example of a fat soluble vitamin.

**PART - C**

3. Write short notes on *any four* : 4x5=20
- (a) Reticulo endothelial system
  - (b) Structure and functions of Pancreas
  - (c) Pastenrization
  - (d) Hypertonic and Hypotonic solutions
  - (e) Enzymes and Coenzymes
  - (f) Bile salts and bile pigments.

## PART - D

Answer *any three* questions :

10x3=30

4. Describe the urinary system and functions of each part of the system.
  5. Give an account of significance of documentation in diagnostic laboratories. Write importance of computers in the laboratory and importance of automation versus conventional methods.
  6. Define hormone. Enumerate various endocrine glands. Describe the structure and functions of pituitary glands.
  7. Enumerate various hazards that can occur in a medical laboratory. Mention various safety measures for prevention of the hazards.
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