



S-2667

M. Sc. (Med. Tech.) (Sem. I) Examination  
March / April – 2011

Paper : MT - 103 : General Biochemistry

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवही पर अवश्य कर्जवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="checkbox"/> M. Sc. (Med. Tech.) (Sem. 1)	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="checkbox"/> Paper : MT - 103 : General Biochemistry	<input type="text"/>
Subject Code No. : <input type="text"/> 2 <input type="text"/> 6 <input type="text"/> 6 <input type="text"/> 7	<input type="text"/>
Section No. (1, 2,.....): <input type="text"/> Nil	
	Student's Signature

- (2) Answer **all** the questions.
- (3) Illustrate your answer with neat diagrams whenever necessary.
- (4) Figures to the **right** indicate full marks.
- 1 Explain any **two** of the following 14
- (a) pH and pK and derive Hendersen-Hesselbalch equation.
- (b) Principle and components of spectrophotometer.
- (c) Various systems of measurements.
- 2 Write on any **two** of the following 14
- (a) Role of lungs and kidney in the maintenance of Acid-base balance
- (b) Anticoagulants and preservative
- (c) Types of body fluids used for analysis and their collection and preservation.
- 3 Write short notes on any **three** of the following 15
- (a) Homopolysaccharides
- (b) Importance of various monosaccharides and disaccharides
- (c) Phospholipids and their importance
- (d) Reactions of amino acids
- (e) Classification of amino acids based on their structure.

- 4 Write on any **three** of the following **15**
- (a) Basal metabolic rate and factors affecting it
  - (b) Bioinformatics and its uses
  - (c) Classification of hormones
  - (d) Nutritional importance of protein and carbohydrates
  - (e) Biological value.
- 5 Discuss on any **two** of the following **12**
- (a) Coenzyme role of folic acid and its deficiency manifestations.
  - (b) Functions and deficiency manifestation of vitamin E.
  - (c) Functions and deficiency manifestation of vitamin C.
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