

[LB 0212]

AUGUST 2012

Sub. Code: 5002

B.Sc. MEDICAL LABORATORY TECHNOLOGY

FIRST YEAR

PAPER II – Basic Chemistry

Q.P. Code : 725002

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer All questions in the same order.

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

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|-----------------------------------------------------------------|---|----|----|
| 1. The classification of lipids and major steroid hormones. | 7 | 20 | 10 |
| 2. The enzyme classification and nomenclature. | 7 | 20 | 10 |
| 3. The classifications of protein and their general properties. | 7 | 20 | 10 |

II .Write notes on:

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|--------------------------------------------|---|----|---|
| 1. Co-enzymes. | 4 | 10 | 5 |
| 2. Reducing property of carbohydrates. | 4 | 10 | 5 |
| 3. Replication of DNA. | 4 | 10 | 5 |
| 4. Formation of Nucleotide. | 4 | 10 | 5 |
| 5. Determination of the strength of acids. | 4 | 10 | 5 |
| 6. Biological value of protein. | 4 | 10 | 5 |
| 7. Chemical properties of carbohydrates. | 4 | 10 | 5 |
| 8. Biological role of trace elements. | 4 | 10 | 5 |

III .Short answers on:

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|---------------------------------------------------------------------------------|---|---|---|
| 1. How the concentration of bi-carbonate can be determined? | 2 | 4 | 3 |
| 2. Write a note on acids and bases. | 2 | 4 | 3 |
| 3. Write a note on the isometric forms of glucose and fructose. | 2 | 4 | 3 |
| 4. Describe the denaturation of protein. | 2 | 4 | 3 |
| 5. Write a note on enzymes as catalysts. | 2 | 4 | 3 |
| 6. Describe the structure of DNA. | 2 | 4 | 3 |
| 7. Write a note on Liebermann Burchard reaction. | 2 | 4 | 3 |
| 8. Explain nitrogen balance. | 2 | 4 | 3 |
| 9. Give example of fibrous water soluble and water insoluble globular proteins. | 2 | 4 | 3 |
| 10. What is called Beer's and Lambert's Law? | 2 | 4 | 3 |
