

[LB 0212]

AUGUST 2012

Sub. Code: 1402

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

FIRST YEAR

PAPER –II-BIO CHEMISTRY & PATHOLOGY

Q.P. Code : 801402

Time: Three hours

Maximum: 100 marks

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

I. Elaborate on:

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

- |  |   |    |    |
|--|---|----|----|
| 1. What are Immunoglobulins? Explain with the help of a tabular column about the different characteristic properties of all the five types.        | 7 | 20 | 10 |
| 2. a. Draw the structure of HIV.<br>b. Explain about the replication of HIV.<br>c. What are Vaccines. Why is it difficult to produce HIV vaccines. | 7 | 20 | 10 |
| 3. Write about the sources, functions and disorders of Vitamin A and D.  | 7 | 20 | 10 |

II. Write Notes on:

- |  |   |    |   |
|--|---|----|---|
| 1. How will you prepare 100 ml of 1M and 1N Sodium hydroxide. Is there any difference? Explain.      | 4 | 10 | 5 |
| 2. When an insect bites you, the layer of the body gets red, swollen and you feel the pain. Explain. | 4 | 10 | 5 |
| 3. Differentiate between Active and Passive immunity.  | 4 | 10 | 5 |
| 4. Write any five important functions of Structural proteins with examples.                          | 4 | 10 | 5 |
| 5. Write the Significance of Henderson Equation.   | 4 | 10 | 5 |
| 6. Write about the role of Calcium in muscle contraction.  | 4 | 10 | 5 |
| 7. Write a note on cell mediated immunity.   | 4 | 10 | 5 |
| 8. Do Mitochondria play a role in Cell death. If so, how?  | 4 | 10 | 5 |

III. Short Answer on:

- |   |   |   |   |
|---|---|---|---|
| 1. Give an example for Gram positive and Gram Negative bacteria.      | 2 | 4 | 3 |
| 2. What is H1N1.  | 2 | 4 | 3 |
| 3. What is the function of B Cell.                                    | 2 | 4 | 3 |
| 4. Name any three physiological buffers.                              | 2 | 4 | 3 |
| 5. Differentiate between Rickets and Osteomalacia.                    | 2 | 4 | 3 |
| 6. What are ketone bodies. Give example.                              | 2 | 4 | 3 |
| 7. How Ph affects the enzyme activity. Explain graphically.           | 2 | 4 | 3 |
| 8. What is the significance of Lactate Dehydrogenase as an isoenzyme. | 2 | 4 | 3 |
| 9. What is Vitamin B12? What is its significance.                     | 2 | 4 | 3 |
| 10. Define BMI.   | 2 | 4 | 3 |

\*\*\*\*\*