

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. MLT Degree Examination – Aug 2013

Time: Three Hours

Max. Marks: 80 Marks

BIOCHEMISTRY (RS3)**Q.P. CODE: 3153**

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary

SHORT ESSAYS (Answer any Eight)**8 x 5 = 40 Marks**

1. Write the classification and functions of carbohydrates.
2. Write briefly a note on nucleotides.
3. Explain bicarbonate buffer system.
4. Define essential fatty acid. What are its functions?
5. Write the classification of amino acids based on nutritional requirement with examples.
6. What are solutions? Classify them with suitable examples.
7. Add a note on hot air oven with diagram.
8. Explain Valency, Equivalent Weight, Normality, Molecular Weight and Molality with suitable examples.
9. Explain two-pan laboratory balance with a diagram.
10. Explain saturated and super saturated solutions with suitable examples.

SHORT ANSWERS (Answer any Ten)**10 x 3 = 30 Marks**

11. Give any three major responsibilities of health care personnel.
12. Write a note on different types of tubes used in the laboratory.
13. Give any three prefixes used in metric system.
14. Triglycerides and cholesterol
15. Write the properties of salts.
16. What are bases? Give two examples.
17. Magnetic stirrer – components and use
18. What is part dilution? Give an example.
19. Uses of refrigerators and cold boxes in laboratory
20. SI units and classification
21. Give the principle of centrifugation. Explain different rotor heads.
22. Draw the graph showing relationship between:
 - a. Absorbance and concentration
 - b. % Transmission and concentration

TO THE POINT ANSWERS (Answer any Five)**5 x 2 = 10 Marks**

23. Automated pipette
24. Reference electrode
25. Mention the types of RNA.
26. Mention different types of waste in a laboratory.
27. Define amino acids
28. Name two indicators.
29. Write Henderson – Hasselbalch's equation.
