

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 29-Oct-2025

Time: Three Hours

Max. Marks: 80

BIOCHEMISTRY

(RS-3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology

RS-2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

Q.P. CODE: 3153

(QP contains two pages)

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. Laboratory balances – types and uses
2. What are monosaccharides? Write the name and structure of important monosaccharides
3. Principles of centrifugation and types of centrifuges
4. What are nucleosides and nucleotides? Give examples
5. Water distillation apparatus
6. Explain physical and chemical hazards
7. Classification of lipids
8. Functions of carbohydrates
9. Functions of Amino acids
10. Write the diagram of incubator and mention its uses in laboratory

SHORT ANSWERS (Answer Any Ten)

10 x 3 = 30 Marks

11. Write the diagram of different flasks used in laboratory
12. First aid kit – components
13. Uses of Petri dish measuring cylinder and desiccators
14. Henderson – Hasselbalch's equation
15. Functions of lipids
16. Preparation of 2N sulfuric acid
17. Essential fatty acids
18. Name aromatic amino acid
19. Applications of radioisotopes
20. pH meter
21. Beer - Lambert's Law and its limitations
22. Reflux condenser

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TO THE POINT ANSWERS (Answer Any Five)

5 x 2 = 10 Marks

23. Bicarbonate buffer
24. Bunsen burner
25. Define valency with example
26. Essential amino acids
27. Significance of borosilicate glass
28. Normal level of arterial blood PO₂ and PCO₂
29. Define test tube and Folin Wu tube
