

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Optometry Degree Examination - 10-Nov-2025

Time: Three Hours

Max. Marks: 100

BASIC BIOCHEMISTRY AND NUTRITION (RS-4)

Q.P. CODE: 3340

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice)

2 x 10 = 20 Marks

1. Give an account of clinical importance of enzymes
2. Describe the citric acid cycle. Add a note on its energetics

OR

Describe the reactions in the synthesis of urea. Mention its normal range in blood and urine

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Explain the digestion and absorption of carbohydrates
4. Explain the Watson and crick model of DNA
5. Nutritional disorders

OR

Write the classification of enzymes with examples

6. Explain the steps in degradation of cholesterol
7. Write the specialized products formed from glycine
8. Explain the biochemical functions of vitamin C
9. Explain the structure and disorders related to collagen
10. Essential fatty acids

OR

Explain the mechanism in regulation of blood buffers

11. Explain the absorption, transport and storage of Cobalamin
12. Describe the structure and functions of any two Mucopolysaccharides

SHORT ANSWER (Question No 15 & 20 choice)

10 x 3 = 30 Marks

13. Types of RNA
14. Conjugated proteins
15. Starch

OR

Functions of nucleotides

16. Energetic of glycolysis
17. Wilson's disease
18. Specific dynamic action
19. Define transamination reaction with examples
20. Example for fat soluble vitamins

OR

ATP formation

21. Respiratory quotient
22. Define free radicals with examples
