

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Optometry Degree Examination - 15-Nov-2024

Time: Three Hours

Max. Marks: 100 Marks

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. Explain the steps of β -oxidation of fatty acids. Add a note on the energy yield in Palmitic acid.
2. Explain the requirement, sources, and factors affecting absorption, functions and deficiency of Iron.

Or

Explain Watson and Crick model of DNA structure with a neat labelled diagram.

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Protein Energy Malnutrition.
4. Explain Buffer system in Blood.
5. List the types of RNA and discuss the structure of tRNA.
6. What is Transamination? Give two examples.
7. Coenzymatic forms, functions and deficiency manifestations of Vitamin B12.
8. Define BMR and explain any four factors affecting BMR.
9. Discuss Biochemical functions of Phosphorus.
10. Define balanced diet. Describe its importance and the factors affecting the planning of balanced diet.

Or

Nitrogen balance.

11. Elucidate the steps of Citric acid cycle.
12. What is Respiratory quotient? Explain its importance.

SHORT ANSWER (Question No 15 & 20 choice)

10 x 3 = 30 Marks

13. Monounsaturated fatty acids.
14. Essential amino acids.
15. Ocular manifestation of Vitamin A
16. What is Keratomalacia?
17. Biochemical functions of Calcium.
18. List the basic five food group plan.
19. Disorders associated with copper metabolism.
20. What are free radicals? Give an example

Or

Lactose intolerance

21. What are Coenzymes? Give examples.
22. List differences between DNA and RNA.