

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Optometry Degree Examination - 28.05.2024

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. Describe the dietary sources, requirement, functions, absorption and deficiency manifestations of Vitamin A.
2. Explain the various steps involved in Glycolysis. Add a note on the energy yield in glycolysis.

Or

Explain the various steps involved in beta oxidation of fatty acid. Write a note on energetics.

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Explain any two factors affecting enzyme action.
4. Explain Wald's visual cycle.
5. Discuss steps of Urea cycle.

Or

Discuss deficiency manifestation of Vitamin D

6. What are essential fatty acids? Give its importance.
7. Explain protein energy malnutrition.
8. Role of Vitamin E in diet.
9. Importance of dietary fibre in the body.
10. Measles and associated eye disorders.

Or

Define and classify Monosaccharides.

11. What are Isoenzymes? Give three examples.
12. What is biological oxidation? Explain ATP formation.

SHORT ANSWER (Question No 15 & 20 choice)

10 x 3 = 30 Marks

13. Define energy and give its unit.
14. List three functions of Albumin.
15. Name the important vitamins associated with ophthalmic function.

Or

Define respiratory quotient.

16. Give two main important functions of phosphorus.
17. Food groups in diet planning.
18. List the three main and buffer systems in the body.
19. Define anti-oxidants and give examples.
20. Write three differences between DNA and RNA.

Or

State any three functions of Iron.

21. List the ketone bodies.
22. Draw neat labelled diagram of tRNA.