

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Optometry Degree Examination - 16-May-2023

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 steps of Krebs's cycle. Discuss about regulation and Energetics.
2. Mention the sources of Nitrogen. Describe urea cycle.

Or

Discuss the chemistry, sources, RDA, Biochemical functions and deficiency manifestation of Vitamin A

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Explain in detail about blood buffer system.
 4. Structure and functions of tRNA.
 5. Describe the deficiency manifestation of thiamine.
- Or
- Discuss the digestion and absorption of protein.
6. Biochemical function of Iron.
 7. Diagnostic importance of enzymes.
 8. Therapeutic uses of antioxidants.
 9. What are essential fatty acids? List their functions.
 10. What are reducing Disaccharides? Explain sources, composition and Biochemical tests to identify them.

Or

Discuss oxidative and substrate level phosphorylation.

11. Describe effect of pH and temperature on enzyme action.
12. Explain structure, types and functions of collagen.

SHORT ANSWER (Question No 15 & 20 choice)

10 x 3 = 30 Marks

13. List three functions of Albumin.
 14. What is hyperlipidemia?
 15. List any six factors affecting BMR.
- Or
- Give full forms of GTP, tRNA and VLDL.
16. List any three differences between fat and water soluble vitamins.
 17. List the Glycosaminoglycans with their distribution.
 18. Define respiratory quotient and write any two significance.
 19. Define co-enzyme and give two examples.
 20. Discuss any three functions of copper.

Or

Discuss measles associated Eye disorders.

21. List rate limiting enzymes of Glycolysis.
22. What is the role of rhodopsin in vision?