# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Optometry Degree Examination - 22-Nov-2023

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)**

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Define RNA. Write the structure and functions of various types of RNA
- 2. Describe the hexose monophosphate shunt and add a note on its significance

Write an account of the various factors affecting enzyme activity

### **SHORT ESSAYS (Question No 5 & 10 choice)**

 $10 \times 5 = 50 \text{ Marks}$ 

- 3. Glycosaminoglycans
- 4. Diagnostic importance of serum enzymes
- 5. Explain the factors affecting Basal Metabolic Rate (BMR)

OR

Explain the biochemical functions of phospholipids

- 6. Explain Wald's visual cycle
- 7. Write the structure and functions of three important disaccharides
- 8. Explain the classification of lipids with examples
- 9. Plasma protein
- 10. What are ketone bodies? Explain ketogenesis

OR

Explain the fluid mosaic model of plasma membrane

- 11. Write a note on sources, RDA, biochemical functions of copper
- 12. Explain the nutritional aspects of proteins

#### **SHORT ANSWER (Question No 15 & 20 choice)**

 $10 \times 3 = 30 \text{ Marks}$ 

- 13. Nitrogen balance
- 14. Functions of fatty acids
- 15. Antioxidants

OF

Coenzymes

- 16. Lactose intolerance
- 17. Peptide bond
- 18. Write any four nucleotides
- 19. Active site of enzyme
- 20. Benedict's test

OF

Rothera's test

- 21. Hypocholesterolemic agents
- 22. Oxidative deamination

\*\*\*\*