# Rajiv Gandhi University of Health Sciences, Karnataka

# I Year B.Sc. Allied Health Sciences Degree Examination - 27-Nov-2023

Time: Three Hours Max. Marks: 100 Marks

## **BIOCHEMISTRY**

(RS-3 – B.Sc Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology,
Respiratory Care Technology, Neuro Sciences Technology, Anesthesia Technology,
Operation Theatre Technology, Emergency and Trauma Care Technology)
(RS-4 – B.Sc Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology)
Anesthesia and Operation Theatre Technology

Q.P. CODE: 3263 (OP contains two pages)

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. Give a detailed account of chemistry, source, RDA, functions and deficiency disorders of Vitamin C.
- 2. Describe the reactions of glycolysis indicating the enzymes. Add a note on net yield of ATP under aerobic and anaerobic glycolysis.

OR

Describe the reactions of Urea cycle.

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

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

- 3. What is HMP Shunt? Give its significance.
- 4. Monosaccharides.
- 5. Describe the digestion and absorption of lipids.

OR

Essential amino acids.

- 6. Calcium sources, RDA, functions and deficiency manifestations.
- 7. Hyperglycemic hormones.
- 8. Clearance tests to assess glomerular functions.
- 9. Ketone bodies and their clinical significance.
- 10. Define and classify lipids. Add a note on its functions.

OR

BMR.

- 11. What are solutions? Classify them with suitable examples.
- 12. Define and classify enzymes with examples.

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

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

- 13. Balanced diet.
- 14. Different types of RNA with their functions.
- 15. Normal serum levels of a) Serum Urea b) Blood Glucose c) Serum Creatinine.

OR

Ocular manifestations of Vitamin A deficiency.

# Rajiv Gandhi University of Health Sciences, Karnataka

- 16. Beri Beri.
- 17. Structure of t-RNA.
- 18. Define normal, molar and percent solution.
- 19. Pellagra.
- 20. Buffers.

#### OR

Ketosis.

- 21. Biological effects of radiations.
- 22. Isoelectric pH

\*\*\*\*