

# Rajiv Gandhi University of Health Sciences, Karnataka

## Second Semester B.Pharm Degree Examination – 08-Nov-2023

Time: Three Hours

Max. Marks: 75 Marks

### BIOCHEMISTRY Q.P. CODE: 5007

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

All the questions are compulsory

#### LONG ESSAYS

2 x 10 = 20 Marks

1. Explain the biosynthetic pathway of purine nucleotide.

**OR**

Explain the De novo biosynthesis of fatty acids with all the enzymes involved.

2. Explain the various reactions involved in Krebs cycle with its energetics.

#### SHORT ESSAYS

7 x 5 = 35 Marks

3. Write the formation of ketone bodies in the body.

**OR**

Explain the chemiosmotic theory of oxidative phosphorylation.

4. Write the process of transcription.

**OR**

Give the structure and biological significance of ATP and Cyclic AMP.

5. Discuss the hormonal regulation of blood glucose level.

6. Define coenzymes. Discuss the different types of coenzymes associated with Vitamin B-complex.

7. Write the disorders of lipid metabolism.

8. Classify enzymes according to IUB with example.

9. Define and classify amino acids with examples.

#### SHORT ANSWERS

10 x 2 = 20 Marks

10. Name the purine and pyrimidine bases.

11. What is albinism?

12. What is redox potential?

13. **Write the inhibitors of ETC**

14. Write significance of HMP shunt.

15. **List two difference between DNA and RNA**

16. Define genetic code.

17. **Write the significance of 5-HT**

18. Define Hyperbilirubinemia.

19. Define Allosteric enzymes.

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