

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination — SEP-2018

Time: Three Hours

Max. Marks: 80 Marks

## BIOCHEMISTRY (RS-5)

**Q.P. CODE: 2733**

Your answers should be specific to the questions asked  
Draw neat, labeled diagrams wherever necessary **LONGESSAYS**  
**(Answer any Two)**

**2 x 10 = 20 Marks**

1. Describe B-oxidation. Calculate the energetics of palmitic acid oxidation.
2. What is normal pH of blood? How is it maintained?
3. Write in detail about glycogenesis and glycogenolysis.

## SHORT ESSAYS (Answer any Eight)

**8 x 5 = 40 Marks**

4. Classify carbohydrates with suitable examples.
5. Describe digestion and absorption of proteins.
6. List out functions and deficiency symptoms vitamin D.
7. Name any five diagnostic enzymes and mention their clinical significance.
8. Describe the secondary structure of proteins.
9. Balanced diet
10. Blood glucose regulation
11. Classification and functions of lipids.
12. Draw tRNA and describe its functions
13. Name essential fatty acids. Describe its two functions and two deficiency symptoms.

## SHORT ANSWERS

**10 x 2 = 20 Marks**

14. Protein calorie malnutrition
15. CAMP
16. Metabolic alkalosis
17. Alkaptonuria
18. Normal levels of blood urea and mention two causes of increased blood urea
19. Indications for GTT (Glucose tolerance test)
20. Describe Pinocytosis and phagocytosis.
21. Genetic code
22. Calorific value of carbohydrate, protein and lipids
23. Biochemical functions of Biotin