

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination - 08-Mar-2021

Time: Three Hours**Max. Marks: 80 Marks****BIO-CHEMISTRY (RS-3 & RS-4)****Q.P. CODE: 2703**

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary.

LONG ESSAYS (Answer any One)**1 x 10 = 10 Marks**

1. Explain sources, daily requirement, functions and deficiency manifestations of vitamin D.
2. Define balanced diet. Mention the nutritional importance of carbohydrates, proteins and lipids.

SHORT ESSAYS (Answer any Eight)**8 x 5 = 40 Marks**

3. Classify lipids with suitable example.
4. Explain the absorption, distribution and storage of calcium.
5. Define BMR. Explain the factors affecting it.
6. Define enzymes. Mention any two factors affecting enzyme activity.
7. Explain how lipids are absorbed in the Gastro intestinal tract.
8. Urea cycle
9. Mention important products formed by phenyl alanine and glycine.
10. Explain the structural organization of proteins with example.
11. Explain the regulation of blood glucose.
12. Explain the structure of plasma membrane with suitable diagram.

SHORT ANSWERS**10 x 3 = 30 Marks**

13. Write the levels calcium and urea in serum.
14. Enumerate any two causes of metabolic acidosis.
15. What is anion gap?
16. Enumerate any two functions of proteins.
17. Enumerate any two thyroid function tests.
18. Essential amino acids.
19. Enumerate any two biologically important compounds produced from cholesterol.
20. Invert sugar
21. Name any two second messengers
22. Functions of Lysosomes.
