

Rajiv Gandhi University of Health Sciences, Karnataka**I Year B.P.T. Degree Examination - APRIL- 019****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****LONG ESSAYS (Answer any Two)****2 x 10 = 20 Marks**

1. Describe in detail the tricarboxylic acid cycle and the energy production. Add a note on its amphibolic role.
2. Classify amino acids with examples. Mention Chemical properties of amino acids.
3. Describe In detail the sources, absorption, functions and factors regulating blood calcium level. Discuss deficiency manifestations of calcium,

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

4. ERNA
5. Classify enzymes with suitable examples.
6. Wald's visual cycle
7. Active form of vitamin D and its biological role
8. Digestion and absorption of carbohydrates
9. Phenylketonuria
10. Glycogen synthesis
11. Renal regulation of blood
12. Isoenzymes and their clinical significance
13. Phospholipids

SHORT ANSWERS**10 x 2 = 20 Marks**

14. Name the serum electrolytes and give their normal values.
15. Mention the hormones involved in blood glucose level regulation.
16. What are dietary fibers? Write two examples.
17. Caloric value
18. Mention two causes for: 1. Respiratory acidosis 2. Metabolic acidosis. 19. Chargaff's rule

Isoelectric point

21. Essential fatty acids
22. KM value and its significance
23. Dehydration