



Rajiv Gandhi University of Health Sciences, Karnataka

MBBS (Phase - I) Degree Examination - Dec-2014

Time: Three Hours**Max. Marks: 100 Marks**

Biochemistry – Paper I (Revised Scheme)

Q.P. CODE: 1055

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS**2 x 9 = 18 Marks**

1. Describe Tricarboxylic Acid (Citric Acid) Cycle. Add a note on its energetics and regulation.
2. Mention the sources, daily requirement, and functions of Calcium. Explain how Serum Calcium levels are regulated.

SHORT ESSAYS**10 x 5 = 50 Marks**

3. Name the Co-enzyme form of Vitamin B6. Describe the biochemical reactions involving it.
4. Formation and fate of Bilirubin
5. Renal regulation of pH
6. Write a note on Salvage pathway of Purines.
7. Competitive inhibition of enzyme activity
8. Explain the following aspects of Thiamine (a) Co-enzyme, (b) Functions, (c) Deficiency manifestations.
9. Discuss the biochemical changes during Starvation.
10. Urea cycle and its regulation
11. Formation and clinical significance of Ketone bodies
12. Oxidative Phosphorylation

SHORT ANSWERS**16 x 2 = 32 Marks**

13. Pellagra
14. Invert sugar
15. Name any four diagnostic enzymes.
16. Proteolytic enzymes
17. Role of Carnitine in β oxidation
18. Name the enzyme defect in (a) Phenylketonuria, (b) Alkaptonuria.
19. Creatinine clearance
20. Respiratory Quotient
21. What is Mutation? Give two examples.
22. Role of Cytochrome P450 in detoxification
23. Vanden Bergh's reaction
24. Name the Blood Buffers.
25. Lipotropic factors
26. Name the products formed from Glycine.
27. Give the normal values of fasting Blood Glucose and Blood Urea.
28. Hartnup's disease

