

# Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2008

Time : 3 Hrs.

[Max. Marks : 100]

## BIOCHEMISTRY (Revised Scheme)

QP Code: 1055

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

### LONG ESSAY

2 X 9 = 18 Marks

1. Give an account of the metabolism of glycine and outline the synthesis of different important substances from glycine
2. Give an account of the  $\beta$ -oxidation of palmitic acid and its energetics

### SHORT ESSAY

10 X 5 = 50 Marks

3. Glycogenesis
4. Metabolism of galactose
5. Competitive inhibition and its usefulness in therapeutics
6. Multienzyme complexes
7. Biochemical functions of vitamin C
8. One carbon metabolism
9. Fatty livers and lipotropic factors
10. Gout
11. Replications
12. Calcium homeostasis

### SHORT ANSWERS

16 X 2 = 32 Marks

13. What are epimers? Give examples
14. Isoelectric pH and its significance
15. Essential fatty acids
16. Give two examples of substrate level phosphorylation
17. How is aspirin detoxified?
18. Name two metabolic disorders of amino acids metabolism and indicate the enzyme defect
19. Name two lipid storage disorders and indicate the corresponding enzyme defect
20. Indicate sources of various atoms of purine ring
21. Name the hemoglobinopathies
22. What is a codon? Mention the termination codons
23. Give two examples for post translational modification
24. How is heme synthesis regulated?
25. Outline the structure of immunoglobulins
26. Name four liver function tests
27. SDA
28. Nutritional deficiency disorders in India

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