

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - December 2010

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. Describe the pentose phosphate pathway. Why is it called multifunctional? What is the significance of this pathway
2. Describe the β - oxidation of palmitate. Write a note on its energetics

SHORT ESSAY**10 X 5 = 50 Marks**

3. Any three liver function tests
4. Functions of phospholipids
5. Formation of bile acids
6. Detoxication by conjugation with examples
7. Use of phosphate buffer in maintaining acid base balance
8. Applications of DNA recombinant technology
9. Urea cycle and its regulation
10. Facilitated diffusion
11. Factors affecting enzyme activity
12. What is PKU. What are the alternate metabolic pathways for the accumulated phenyl alanine? How is it diagnosed biochemically

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

13. Functions of vitamin A
14. Importance of essential amino acids
15. Functions of dietary fibre
16. Biochemical role of thiamine
17. Zymogens
18. Explain any two types of porphyrias
19. Four functions of plasma proteins
20. Respiratory Quotient
21. Structure and functions of any two immunoglobulins
22. Positive nitrogen balance
23. Salient features of Chargaff's rule
24. Secondary structure of proteins
25. Amphibolic role of citric acid cycle
26. Function of free radicals
27. Transport and storage of iron
28. Importance of any two prostaglandins