

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - August 2006

Time : 3 Hrs.

[Max. Marks : 90]

Biochemistry [Old Scheme]

QP Code - 1005

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

LONG ESSAY

2 X 10 = 20 Marks

1. How is phenylalanine metabolized in the body? Add a note on the in born errors of metabolism of phenylalanine.
2. What is the normal pH of blood? What are the mechanisms by which the pH is maintained?

SHORT ESSAY

10 X 5 = 50 Marks

3. Role of Insulin in regulation of blood glucose.
4. Classify enzymes with 2 examples of each class.
5. Waide's visual cycle
6. Essential fatty acids
7. Structure and functions of tRNA
8. Intestinal absorption of glucose
9. Fatty acid synthase complex
10. Use of radio active isotopes in biochemistry
11. Post transcriptional modifications of mRNA
12. Recombinant DNA

SHORT ANSWERS

10 X 2 = 20 Marks

13. Role of oncogenes in carcinogenesis
14. Write normal values of
 - a) Blood urea
 - b) Serum cholesterol
 - c) Serum uric acid
 - d) Serum calcium
15. Write chemical reactions by which propionyl CoA is converted to succinyl CoA
16. Write 2 anaplerotic reactions in TCA cycle
17. Define epimers. Name 2 epimers of alpha D-Glucose
18. How is galactose metabolized? Which is the enzyme deficient in classical galactosaemia
19. Role of glutathione in erythrocytes
20. Give 2 functions of vitamin B₁₂
21. Draw the glucose tolerance curve seen in alimentary glucosuria
22. What are the deficiency manifestations of niacin

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