

Rajiv Gandhi University of Health Sciences, Karnataka

I Year Pharma-D Examination - Aug 2013

Time: Three Hours

Max. Marks: 70 Marks

MEDICAL BIOCHEMISTRY

Q.P. CODE: 2853

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. Explain transamination reactions with examples. Outline the steps involved in urea cycle, give its significance
2. Discuss the process of oxidative phosphorylation and coupling phenomenon in the respiratory chain
3. Give an account on the steps involved in the biosynthesis of proteins. Add a brief note on inhibition of protein synthesis

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. What is gluconeogenesis? Explain and give its significance
5. Discuss the two types of reversible inhibition of enzyme action
6. Give the breakdown of purine nucleotides
7. List out the different kidney function tests. Explain any two of them
8. What are coenzymes? Explain the biochemical role of the coenzymes of Vitamin B₂ and B₆
9. Describe the mitochondrial reactions of β - oxidation with energetics
10. Give a brief account on the determination of electrolytes in the body fluids
11. Give the chemical structure and biological significance of ATP and cyclic AMP

SHORT ANSWERS

10 x 2 = 20 Marks

12. How many moles of ATP are formed in glycolysis when the end product is
a) Pyruvic acid b) Lactic acid
13. Name any four biologically important compounds formed from cholesterol. Give the structure of any one
14. What is ELISA? Give its significance
15. Write a note on replication bubble
16. Write about HDL and LDL
17. What are allosteric enzymes? Give two examples
18. Distinguish between diabetes mellitus and diabetes insipidus
19. write note on carnitine
20. Write a note on nitrogen balance
21. Give the dye test for the excretory function of liver
