# Rajiv Gandhi University of Health Sciences, Karnataka I Year Pharma-D Examination - Feb / Mar 2012 

Time: Three Hours

Max. Marks: 70 Marks

## MEDICINAL 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)

$2 \times 10=20$ Marks

1. Distinguish between glycolysis and glycogenolysis. Discuss glycolysis with reactions
2. Discuss the reactions involved in the $\beta$-oxidation of fatty acids, giving details of the enzymes involved. Give its energetics
3. What are enzymes? Give their IUB classification. Discuss the different enzyme inhibitions

## SHORT ESSAYS (Answer any Six)

$6 \times 5$ = 30 Marks
4. What is replication? Explain the semiconservative mode of replication of DNA
5. Enlist the different liver function tests. Explain the dye test for excretory function of liver
6. Discuss the metabolism of pyrimidine nucleotides
7. Give the chemical structure of vitamin $B_{1}$. Discuss its biochemical role and deficiency symptoms
8. What is glucose tolerance test? Explain and give its significance
9. Give the structure and biochemical importance of any two energy rich compounds
10. Explain urea cycle. Give its significance
11. What are deamination reactions? Explain with suitable examples

## SHORT ANSWERS

$10 \times 2$ = 20 Marks
12. What is ketogenesis? Give its significance
13. What are isoenzymes? Give two examples
14. Write a note on reverse transcriptase
15. Write about the effect of pH on enzyme activity
16. Write a note on urinary tract calculi
17. What are essential amino acids? Give the name and structure of any two of them
18. Distinguish between oxidative phosphorylation and substrate level phosphorylation
19. Give three structural difference between DNA and RNA

20 Give the significance of HMP shunt
21. Write briefly about the concept of ribozymes

