

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year Pharm-D Degree Examination - DEC-2014

**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 x 10 = 20 Marks**

1. Explain the biochemical reaction steps involved in the protein biosynthesis.
2. Define glycolysis. Describe the biochemical pathway for breakdown of glucose to pyruvate and lactate. Write about the energetics.
3. Outline the reaction steps involved in the cholesterol biosynthesis.

#### **SHORT ESSAYS (Answer any Six)**

**6 x 5 = 30 Marks**

4. Describe the synthesis and metabolism of ketone bodies.
5. Describe the steps involved in the  $\beta$ -oxidation of palmitic acid with energetics.
6. Metabolism of bile pigments
7. Explain the hormonal regulation of carbohydrate metabolism.
8. Differentiate between oxidative phosphorylation and substrate phosphorylation.
9. Mention the different kidney function tests. Explain in detail any two of them.
10. Radio immuno assay (RIA).
11. What are Isoenzymes? Give their diagnostic applications.

#### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. Semiconservative replication of DNA
13. Cyclic AMP.
14. Transamination.
15. Urinary tract calculi.
16. Serum bilirubin.
17. Porphoria.
18. Uncouplers of ETC.
19. Atherosclerosis.
20. Diabetes mellitus.
21. Essential amino acids

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