



# Rajiv Gandhi University of Health Sciences, Karnataka

I Year Pharm-D Examination - NOV 2017

**Time: Three Hours**

**Max. Marks: 70 Marks**

## **MEDICINAL BIOCHEMISTRY (RS & RS2)**

**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 reactions, energetics and significance of TCA cycle.
2. Explain in detail about biosynthesis of proteins.
3. Define enzyme inhibition and discuss the different types of enzyme inhibitions.

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

**6 x 5 = 30 Marks**

4. Discuss the biochemical role and deficiency symptoms of vitamin B<sub>2</sub> and B<sub>6</sub>.
5. Explain the reactions of palmitate synthesis starting from acetyl CoA.
6. Explain the chemiosmotic theory of oxidative phosphorylation.
7. Explain the transamination reactions involved in the catabolism of amino acids.
8. List out different kidney function tests Explain any two of them.
9. What is ELISA? Give its principle and application.
10. Write the principle and significance of SGPT and SGOT determination.
11. Discuss the glucose tolerance test with its significance.

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. Write the structure and significance of ATP.
13. What is Gout?
14. Write Michaelis-Menten equation with notations used.
15. What is the use of malate-aspartate shuttle?
16. What is hypercholesterolemia? Name two disorders that result in hypercholesterolemia.
17. Name four metabolic disorders of urea cycle with enzyme defect.
18. What are Okazaki fragments?
19. How is the level of sodium determined in the body fluids?
20. Write about HDL and LDL
21. Write the composition of ORS.

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