Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (M.L.T) Degree Examination – APRIL 2015

Time: Three Hours **Max. Marks: 80 Marks**

BIOCHEMISTRY – II (RS - 2)

Q.P. CODE: 1231

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. Write briefly the reaction steps in glycolysis. Explain the energetics of glycolysis.
2. Explain beta-oxidation of fatty acid. Write the energetics of oxidation of Palmitic acid.
3. Describe the sources, daily requirement and normal levels of vitamin B12. Enumerate any three functions of Vitamin B12.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Explain glycogen synthesis.
5. What is atherosclerosis? What are the risk factors of atherosclerosis?
6. Write the principle, instrumentation and application of atomic absorption spectrophotometry.
7. Nutritional importance of proteins.
8. Define adsorption, viscosity and surface tension.
9. Explain the mechanism of action of enzyme.
10. Write the principles and application of serum electrophoresis.
11. Write the urea cycle.

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Enumerate any three glycogen storage disorders.
13. Enumerate any six water soluble vitamins and their chemical name.
14. What is Km? What is the significance of Km?
15. Write any three functions of Riboflavin.
16. What is enzyme specificity? Enumerate any three types of specificity with suitable examples.
17. Define BMR.
18. Give three examples of coenzymes.
19. Define calorific value of food, and give the calorific value of carbohydrate proteins and lipids.
20. What are coenzyme form of niacin and thiamine?
21. Enumerate any three functions of dietary fibres.
22. Which test is used for the detection of ketone bodies and glucose in urine?
23. What is the function of Ig E and Ig A?

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