



## Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (M.L.T) Degree Examination – MAR/APR 2017

**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. Define neoglucogenesis. Write briefly the reaction steps in neoglucogenesis. Explain how neoglucogenesis is regulated.
2. Define enzyme, coenzyme and cofactor. What is the difference between enzyme and coenzyme and cofactor? Classify enzymes with suitable examples.
3. Describe the sources, daily requirement and normal levels of vitamin A. Enumerate any three functions of Vitamin. Explain briefly the Wald's visual cycle.

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

**6 x 5 = 30 Marks**

4. Write the steps of beta-oxidation of fatty acids.
5. Explain how the uric acid is synthesized in the cell.
6. Write the synthesis and function of vitamin D.
7. Write the principle and instrumentation of spectrophotometer.
8. Explain the regulation of blood glucose.
9. Explain the mechanism of action of enzyme.
10. Write the principle and clinical utility of turbidimetry and nephelometry.
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 the role of IgM in immunity?
15. Write any three functions of thiamine.
16. Define competitive and non-competitive inhibition of enzymes.
17. Define BMR.
18. Define calorific value. What is calorific value of carbohydrate, protein and lipid?
19. Define nitrogen balance. What are the causes of positive and negative balance?
20. What are the techniques used to estimate drug?
21. Define dietary fibre and give examples.
22. What are the abnormal constituents of urine?
23. Write the structure of immunoglobulin.

\*\*\*\*\*