



# Rajiv Gandhi University of Health Sciences, Karnataka

**III Year B.Sc. (MLT) Degree Examination - 24-Aug-2020**

**Time: Three Hours**

**Max. Marks: 80 Marks**

## **BIOCHEMISTRY – PAPER III (RS-3)**

**Q.P. CODE: 3159**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

### **LONG ESSAY (Any Two)**

**2 x 10 = 20 Marks**

1. Explain the HMP shunt in detail and write its significance.
2. Explain the sources, RDA, functions and deficiency features of Vitamin A.
3. What is electrophoresis? Explain the method of separation of plasma proteins by this method. Draw the normal pattern obtained in alkaline pH.

### **SHORT ESSAY (Any Six)**

**6 x 5 = 30 Marks**

4. Explain types of Jaundice.
5. Principle types and uses of ELISA technique.
6. Iron metabolism.
7. Dietary fibers.
8. Thyroid function tests.
9. Renal regulation of acid base balance.
10. Ketogenesis and conditions causing ketosis.
11. Name the key enzymes of Beta-oxidation of fatty acids and write the reactions catalysed by them.

### **SHORT ANSWERS (Any Ten)**

**10 x 3 = 30 Marks**

12. Alpha feto protein.
13. Write the normal serum level of :  
a) Sodium b) Total Cholesterol c) Potassium
14. Composition of renal calculi
15. Give two examples for detoxification by conjugation.
16. Galactosemia.
17. Give an example each of preanalytical, analytical and postanalytical error in clinical laboratory.
18. Okazaki fragment.
19. Functions of calcium.
20. Vitamin K.
21. Enzyme markers in acute pancreatitis.
22. Define balanced diet.
23. What is meant by point of care testing? Give one example.

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