

# Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - August 2007

Time: 3 Hours

[Max. Marks: 100]

## BIOCHEMISTRY (Revised Scheme II)

QP Code: 1079 – Paper I (Max. Marks: 50)

Your answer shall be specific to question asked. Draw neat and labelled diagrams wherever necessary. **Use separate answer books for section A and section B.**

### LONG ESSAY

**1 X 10 = 10 Marks**

1. Define glycogenesis & glycogenolysis. Write the reactions of glycogenesis & glycogenolysis in Liver. How are these two pathways reciprocally regulated ?

### SHORT ESSAY

**5 X 5 = 25 Marks**

2. Explain competitive & noncompetitive inhibition. Mention significance of competitive inhibition.
3. What is Fatty Liver? Explain its causes.
4. Give an account on organization of Electron Transport Chain (ETC).
5. Tumor Markers.
6. Explain the steps of Urea Cycle & Mention the names of its disorders.

### SHORT ANSWERS

**5 X 3 = 15 Marks**

7. Explain enzyme profile in Myocardial infarction.
8. What is normal serum level of cholesterol? Name its four biological functions?
9. What are Antioxidants. Name chain breaking and preventive antioxidants.
10. Give metabolic functions of Endoplasmic Reticulum & Mitochondria.
11. Explain detoxication by conjugation with two examples.

QP Code: 1080 – Paper II (Max. Marks: 50)

**Use separate answer book**

### LONG ESSAY

**1 X 10 = 10 Marks**

1. What are nucleotides? Explain the catabolism of purine nucleotides. Write briefly on the metabolic disorders associated with purine metabolism.

### SHORT ESSAY

**5 X 5 = 25 Marks**

2. How bilirubin is formed & detoxified in the body.
3. Explain metabolic role of Calcitriol.
4. What is plasmid ? what is its applications in recombitant DNA technology
5. Give an account of storage and transport of iron.
6. Explain metabolic & respiratory acidosis.

### SHORT ANSWERS

**5 X 3 = 15 Marks**

7. Which are inhibitors of protein biosynthesis.
8. Protein calorie malnutrition.
9. Significance of non-protein nitrogenous substances.
10. Functions of pyridoxal phosphate.
11. Types of RNA & their functions.

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