

Time: 3 Hours

[Max. Marks: 100]

**BIOCHEMISTRY (RS 2 & RS 3)**
**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. Discuss the formation and fate of ketone bodies

**SHORT ESSAY**
**5 X 5 = 25 Marks**

2. Glycogenolysis
3. Decarboxylation of amino acids
4. Diagnostic uses of enzymes
5. Fatty acid synthase complex
6. Detoxification by oxidation

**SHORT ANSWERS**
**5 X 3 = 15 Marks**

7. Free radicals and disease
8. Active transport
9. Essential amino acids
10. Any three enzymes unique to gluconeogenesis
11. Uncouplers of oxidative phosphorylation

**QP Code: 1080 – PAPER II (Max. Marks: 50)**
**Use separate answer book**
**LONG ESSAY**
**1 X 10 = 10 Marks**

1. What is genetic code. Describe the process of eukaryotic translation

**SHORT ESSAY**
**5 X 5 = 25 Marks**

2. Nitrogen balance
3. Functions of albumin
4. Biochemical functions and deficiency manifestations of vitamin D
5. Functions of iodine
6. Structure of mRNA

**SHORT ANSWERS**
**5 X 3 = 15 Marks**

7. Types and causes of beri – beri
8. Causes of sickle cell anemia
9. Immunoglobulin A (IgA) and immunoglobulin M (IgM)
10. Describe any three renal function tests
11. What is orotic aciduria? Explain the biochemical basis of manifestation

\* \* \* \* \*