

**Time: Three Hours****Max. Marks: 50 Marks****BIOCHEMISTRY – PAPER I (RS3)****QP Code: 1079**

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 1079 and 1080 are to be, answered within total duration of three hours)**(Use separate Answer books for QP Code 1079 & 1080)****LONG ESSAYS****1 x 10 = 10 Marks**

1. Name the aromatic amino acids. Discuss how phenylalanine is catabolised in the body. Add a note on alkaptonuria.

SHORT ESSAYS**5 x 5 = 25 Marks**

2. Metabolism of high-density lipoprotein and its significance
3. Competitive and non-competitive enzyme inhibition with examples
4. How is galactose metabolized? Add a note on galactosemia.
5. Reactions of citric acid cycle (TCA cycle) and its energetics
6. Formation and utilization of Ketone bodies

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

7. Active transport across membranes
8. Application of radioactive isotopes in medicine
9. Significance of free radicals and antioxidants
10. Carcinogens
11. Enzyme linked immune sorbent assay
