

**Roll No.....**  
**Total No. of Questions: [09]**

**Total No. of Printed Pages: [01]**

**B.Sc. (MLS/MLT) (Semester – 2<sup>nd</sup>)**  
**BIOCHEMICAL METABOLISM**  
**Subject Code: BMLS1-211**  
**Paper ID: [130508]**

**Time: 03 Hours** **Maximum Marks: 60**

**Instruction for candidates:**

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

**Section – A** **(2 marks each)**

Q1. Attempt the following:

- a. Nucleic acid
- b. Transamination
- c. Glycogenesis
- d. Functions of lipase enzyme
- e. Water and fat soluble vitamins
- f. Different hormones involved in carbohydrate metabolism
- g. Ketosis
- h. Gluconeogenesis
- i. Essential amino acids with examples
- j. Nucleotides

**Section – B** **(5 marks each)**

Q2. Write a note on Pentose phosphate Pathway

Q3. Explain Biosynthesis of cholesterol

Q4. Define Urea cycle

Q5. Define Salvage pathway

Q6. What is a Role of antioxidants in human body?

**Section – C** **(10 marks each)**

Q7. Discuss in detail about Type III Glycogen Storage Disease

Q8. Discuss importance of  $\beta$ -oxidation in the body.

Q9. Explain biosynthesis and regulation of essential and non-essential amino acids