**Course Title: Basic Biochemistry**

**Summer Semester (mid & final)**

**Instructor: Sana khan**

**Student Name:**

**Student ID:**

 **Max Marks: 80**

**Note: There are total 7 questions.**

**Each question from 1 to 5 carry 10 marks,**

**While question 6 and 7 carry 15 marks each with grand total of 80 marks.**

**ATTEMPT all questions.**

**Avoid copy paste material from any source, as it may deduct your marks.**

Q1: Define Dickens and Horecker’s Pathway also explain irreversible phase of HMP pathway. Enlist the enzymes used in non-Oxidative phase of HMP Pathway.

Q2: What are the steps and enzymes involved in Glycolysis.

Q3: Discuss digestion and absorption of Carbohydrates.

Q4: Explain step by step the Tricarboxylic acid cycle.

Q5: Differentiate between Fat and oil also explain “solid fat is beneficial for health or oil”.

Q6: What are the macromolecules found in Plasmalema also discuss the Bilaminar structure of Cell membrane.

Q7: Discuss amino acids on the basis of requirement in protein synthesis also enlist the Acidic, Aliphatic and Basic amino acids.