**Department of Biochemistry**

Sylhet Women’s Medical College

Card final examination on

“**Bioenergetics ,digestion, absorption and metabolism”,**

SWMC-10 SAQ

Full Marks 40 Time: 1.20 min, Date: 27. 08. 2015

*(Answer any eight (8) questions. Each questions carry equal marks)*

1. Define Bioenergetics. Mention the location and components of Electron transport chain (ETC). How ATP is produced in the ETC? (1+2 +2 )
2. What are the lipolytic enzymes. Write down the absorption of lipids. What is lipotropic factor?

(1.5+2+1.5)

3 .Name the ketone bodies. Give some condition characterized by excessive production of ketone

bodies. Explain derangements and consequences of Ketosis. (1 +2+2)

1. What are the sources and fates of acetyl CoA in the body? How many ATP produced from one molecule of acetyl CoA in TCA cycle ? (3+2)

1. Define glycolysis. Mention the irreversible steps of glycolysis. State the importance of anaerobic glycolysis. (1+2+2)
2. How ammonia is produced and eliminated from human body? Mention the importance of transaminases. (2+2+1)

1. State the importance of HMP shunt pathway and gluconeogenesis. Name the rate limiting enzyme of HMP pathway. (2+2+1)

1. Draw and label lipoprotein structure. State the metabolic fate of chylomicron. (2+3)

9. Write short notes on: 1) glycogen storage diseases (2) fatty liver (2.5+2.5)