AZRA NAHEED MEDICAL COLLEGE
DEPARTMENT OF BIOCHEMISTRY

ASSESSMENT MID TERM

2nd Year MBBS

05/06/2020

Total marks: 60
Time Allowed: 2.5 HOURS

Q No. 1.

a. Describe the mechanism of digestion and absorption of fat (4)
b. Enumerate the proteolytic enzymes present in pancreatic and intestinal juices (3.5)

Q No. 2

a. What are uncouplers? Enlist various physiological and synthetic uncouplers with their mode of actions. (4)
b. Write a note on chemiosmotic theory (3.5)

Q No. 3

a. Draw citric acid cycle and show the entry points of glucogenic, ketogenic and both glucogenic and ketogenic amino acids (4)
b. Write a note on amphibolic nature of citric acid cycle (3.5)

Q No. 4

a. Write down the steps of glycolysis with enzymes and factors. How much net energy is liberated when glucose is converted to pyruvate? (4)
b. Write down the significance of HMP Shunt. (3.5)

Q No. 5

a. Write down any four glycogen storage diseases with deficient enzymes and consequences. (4)
b. Write down hyperglycemic and hypoglycemic hormones with their mode of actions (3.5)

Q No. 6

a. Discuss the transport of ammonia from muscle to the liver up to the entry in the urea cycle (4)
b. Discuss the importance of Glutamine & Glutamate in the transport of NH_3 in the body. (3.5)

Q No. 7

a. Where does Urea cycle start? Draw urea cycle with all the enzymes involved in each step (4)
b. Differentiate between CPS I and CPS II. (3.5)

Q No. 8

A child is brought to you witn complaints of vomiting, mental retardation, ketosis and convulsions. The urine has a characteristic odour of Maple syrup.

i. What is your diagnosis? (1)
ii. What is the cause? (3)
iii. What are the lab findings? (2)
iv. What is the possible treatment/management? (1.5)