

[LN 504]

AUGUST 2018

Sub.Code :5055

**M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER V – BIOCHEMISTRY - I**

Q.P. Code: 525055**Time: Three hours****Maximum : 50 Marks****Answer All Questions****I. Essay:****(1 x 10 = 10)**

1. Explain the site, steps and energetics of β oxidation of even chain fatty acids. Add a note on its regulation.

II. Write notes on:**(5 x 4 = 20)**

1. Biochemical functions of Vitamin B12.
2. Functions of calcium.
3. Glucose transporters.
4. Von Gierke disease.
5. Metabolism in adipose tissue during starvation.

III. Short answers on:**(10 x 2 = 20)**

1. Functions of endoplasmic reticulum.
2. Dietary fiber.
3. Physiological importance of glycogenolysis.
4. Define B.M.R. Give its value.
5. Antiatherogenic role of high density lipoprotein cholesterol.
6. IUBMB classification of enzymes.
7. Cori cycle.
8. Suicide inhibition of enzymes.
9. Importance of brown fat.
10. Importance of sphingomyelin.

[LN 504]

NOVEMBER 2018**Sub.Code :5055**

**M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER V – BIOCHEMISTRY - I**

Q.P. Code: 525055**Time: Three hours****Maximum : 50 Marks****Answer All Questions****I. Essay:****(1 x 10 = 10)**

1. What is the normal blood glucose level? Discuss the factors regulating blood glucose in the fasting and postprandial states. Write the diagnostic criteria for diabetes mellitus.

II. Write notes on:**(5 x 4 = 20)**

1. Classify membrane transport mechanisms. Add a note on active transport.
2. Fatty liver.
3. Types of enzyme inhibition with suitable examples.
4. Functions of vitamin B6 and its deficiency manifestations.
5. Biochemical changes in Atherosclerosis.

III. Short answers on:**(10 x 2 = 20)**

1. What are metalloenzymes? Give two examples.
2. What is glycemic index? Mention two examples of high glycemic index food.
3. Limiting aminoacids with examples.
4. Mechanism of action of methotrexate and dicoumarol.
5. Fluorosis.
6. Hemochromatosis.
7. Serum lipid profile.
8. Refsum's disease.
9. Essential pentosuria.
10. Lecithin sphingomyelin ratio.
