

500-A

M.B.B.S. DEGREE EXAMINATION – NOVEMBER, 2014
FIRST M.B.B.S. EXAMINATION
BIOCHEMISTRY
PAPER-I

Time : 2 ½ Hours

Max. Marks: 50

Answer all questions

- 1) Describe the process of β (beta) – oxidation of fatty acids. 7+3=10
Add a note on the energetics of the pathway.
- 2) A 6 year boy was taken to the hospital by his mother with complaints of decreased vision in the night. The doctor suspected a possible vitamin A deficiency. Describe in detail the sources, RDA, functions and deficiency manifestation of the deficient nutrient. What other clinical features, the doctor has to look for in this case and what advice should be given? 1+1+3+3+2=10

WRITE SHORT NOTES ON:

5x4=20

- 3) Describe briefly the hormonal regulation of blood glucose levels.
- 4) Draw a plot of Competitive enzyme inhibition. Give 2 examples of competitive inhibitors.
- 5) Briefly explain the following:
i) Specific Dynamic Action
ii) Glycemic index
- 6) Describe the clinical significance of the following enzymes:
i) LDH ii) Alkaline phosphatase iii) Creatine kinase
iv) Amylase v) Alanine transaminase
- 7) Give an outline of the electron transport chain including ATP generating sites

WRITE BRIEFLY ON:

5x2=10

- 8) Absolute specificity enzymes
- 9) Altered CNS behavior in patients with advanced liver disease.
- 10) Ethanol is administered in patients with methanol poisoning
- 11) Mention functions of Hemoglobinopathies
- 12) Lactose intolerance