

FIRST M.B.B.S. DEGREE EXAMINATION, APRIL 2005
BIOCHEMISTRY—Paper I

Time : 2 Hours and 45 Minutes

Maximum : 45 Marks

Answer Section A-II and Section B in separate answer-books.

Draw diagrams wherever necessary.

Section A-II

II. How Phenyl alanine is metabolised in the body ? Add a note on the in borne errors of metabolism of the amino acid.

(8 + 2 = 10 marks)

III. Write short notes on :

- (a) TCA cycle.
 (b) Enzyme inhibitor.



(2 × 5 = 10 marks)

Section B

IV. Write briefly :—

- (a) Oxidation of Palmitic acid.
 (b) Rate limiting step in cholesterol biosynthesis.
 (c) Role of Vitamin A in crown.
 (d) Enzymatic Oxidation of glucose.
 (e) Significance of Hexose monophosphate shunt pathway.

(5 × 3 = 15 marks)

V. Write precise answers :

- (a) How is propionyl CoA converted to succinyl CoA ?
 (b) Classify phospholipid with examples.
 (c) Depict electron transport chain showing sites of ATP synthesis.
 (d) What are the functions of uronic acid in the body ?
 (e) What is the active form of Vitamin D ? What are the functions of Vitamin D ?

(5 × 2 = 10 marks)

⇒ sulphur amino acid.

→ galactosemia

→ methionine

→ carnitine (carnitine)

ATP

Covalent modification

mechanism action of insulin

Hyaluronic acid & function.