

[KJ 504]

Sub. Code : 4055

II. Write short notes on : (10 × 5 = 50)

FIRST M.B.B.S. DEGREE EXAMINATION.

(Non-Semester)

(Revised Regulations)

Paper V — BIOCHEMISTRY — I

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks  
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Draw labelled diagrams wherever necessary.

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) Write about the sources, activation, biochemical functions, deficiency disease and its detection of Thiamine.

(2) Write in detail about Glucose homeostasis in the human organism and add a note on its biomedical importance.

- (a) Biochemical functions of Vitamin D.
- (b) Absorption of lipids.
- (c) Excretion of Bilirubin and clinical importance of Bilirubin estimations.
- (d) Coupling of oxidative phosphorylation, uncouplers and their importance.
- (e) Clinical importance of Isoenzymes with suitable examples.
- (f) Biochemical changes in Vongierke's disease and their relation to enzyme deficiency.
- (g) Role of LDL receptors in metabolism of low density lipoproteins and the disease caused by its defect.
- (h) Definition, expression and significance of  $K_m$  value.
- (i) Role of liver in integration of metabolism during post prandial state.
- (j) Caloric requirement and its recommended distribution among nutrients in an adult male.