Q.P. Code: MBB103

M.B.B.S. [1st Prof.]

BF/2016/11

Biochemistry – A

M.M. : 50 Time : 3 Hours

Note: 1. Attempt all questions. Illustrate your answer with suitable diagrams.
2. ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
3. **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/PROVIDED**
4. ***The student must write Q.P. Code in the space provided on the Title page of the Answer Book.***

PART - I

1. **Write short notes:**
   a. Energy yield by complete oxidation of palmitic acid. [3]
   b. HMP shunt and its significance. [3]
   c. Biochemical roles of vitamin B_{12}. [3]

2. **Answer briefly:**
   a. Glycated haemoglobin and its clinical utility. [2]
   b. Factors affecting enzyme activity. [3]
   c. Urea cycle. [3]

3. **Compare and contrast the following:**
   a. Primary, secondary and tertiary structures of proteins. [3]
   b. Cofactor, coenzyme and prosthetic group. [3]
   c. Reducing and non-reducing sugars. [2]

PART – II

4. **Describe in detail:-**
   a. Ketogenesis and its regulation. [3]
   b. Biochemical roles of vitamin A in vision. [3]
   c. Diagnostic enzymes in myocardial infarction. [3]

5. **Write in brief:**
   a. Glycogen storage diseases. [3]
   b. Inhibitors of electron transport chain. [2]
   c. Role of vitamin A, C and E in handling oxidative stress. [3]

6. **Write notes on**:-
   a. Isomers, epimers and anomers. [3]
   b. Role of phospholipids as membrane components. [3]
   c. Transamination. [2]
