

First year M.B.B.S Examination

June / July - 2016

Biochemistry: Paper –I

Time: 2.30
..... hours

Code : 9666

Total Marks: 50

- Instruction: (1) Use separate answer books for each section
(2) Answer should be to the point and handwriting should be readable
(3) Draw flow charts wherever applicable.

SECTION –I

1. State true or false with justification on **any five** 10
 - a) C peptide is a structural constituent of active Insulin and has diagnostic importance.
 - b) Punctuator codons do not code for any particular amino acids
 - c) Cardiac troponin enzyme is a poor marker for myocardial infarction
 - d) Several important substances are derived from cholesterol
 - e) Leucine is non-essential and purely glucogenic amino acid
 - f) Restriction endonucleases are referred as molecular scissors
2. Discuss any **one**
 - 1) Factors affecting enzyme activity
 - 2) Initiation steps of protein biosynthesis
3. Write short notes on any **three** 9
 1. Essential fatty acids
 2. Replication bubble
 3. Active transport mechanisms
 4. Biologically important peptides

P T O

SECTION II

4. Write comments on any **five** 10
- 1) Uncouplers of ETC increase body temperature
 - 2) Niacin therapy helps in treating hypercholesterolemia
 - 3) Frame shift mutation is more harmful than point mutation.
 - 4) Aspirin administration to new born having jaundice can cause Kernicterus.
 - 5) Degeneracy and wobbling can reduce the effect of mutations
 - 6) Chloride shift helps in maintaining electrical neutrality of RBC's
5. Discuss any **one** 6
1. Phospholipids
 2. Hybridization techniques
6. Write short notes on **any three** 9
- 1) Immunoglobulins
 - 2) Mutations
 - 3) Mucopolysaccharides
 - 4) Operon concept