BIOCHEMISTRY

PAPER – I

BIO/D/15/03/I

Time : 3 hours
Max. Marks : 100

Important instructions:

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1.	a) Principles used by enzyme for catalyzing a reaction. b) Mechanism of action of 'Chymotrypsin'.		3+7
2.	Keys to successful evaluation of new analytical laboratory method.		10
3.	a) What are the functional and non-functional plasma enzymes? b) Enumerate the marker enzymes for cardiac disease. c) With the help of a graph give the time course of their elevation in blood of myocardial infarction patients.		2+3+5
4.	What are immobilized enzymes? With the help of suitable examples give their applications.		4+6
5.	a) Analytical performance criteria b) Frequency distribution c) Random Sampling d) Calibration e) Linearity		2x5=10
6.	a) Types of pre-analytical variables. b) Total quality management.		4 6
7.	What is glycated haemoglobin? What is its normal level in blood? What is its clinical utility? How is it measured?		2+1+2+5
8.	What is receiver operating characteristics (ROC) plot? How it is beneficial in interpreting study results?		3+7
9.	What is anion gap? What is its clinical significance?		3+7
10.	What type of lipid profile is seen in diabetes mellitus (D.M.) patients? What is the biochemical basis for it?		3+7

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