

FINAL EXAM
 DECEMBER 2015

NATIONAL BOARD OF EXAMINATIONS

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
