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RA-1487-88

P. G. D. M. L. T. Examination

March / April – 2010

Clinical Biochemistry

Time : Hours] [Total Marks : **70**

RA-1487

Instruction :

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **P. G. D. M. L. T.**

Name of the Subject :

☛ **Clinical Biochemistry**

☛ Subject Code No. : **1 4 8 7** ☛ Section No. (1, 2,.....) : **1**

Seat No. :

Student's Signature

1 Answer any **three** of the following : **9**

(a) Define : Constant Systematic error, proportional systematic error and Random analytic error.

(b) What do you mean by initial rate assay? Give examples of initial rate assays.

(c) Which guidelines would you follow for chemical disposal? Enlist them.

(d) How many types of Nebuliser's are there? What are the differences between them?

2 Answer any **two** of the following : **8**

(a) What are the applications of electrophoresis in the clinical laboratory? Describe Cellulose Acetate membrane electrophoresis.

(b) Give a diagrammatic illustration of the components of a liquid scintillation counter. Mention the function of each component.

(c) Enumerate the different types of centrifuges and explain axial centrifuge.

3 Answer any **two** of the following : **10**

(a) Define clinical informatics. Enlist the various components of a clinical information system and discuss any three of them.

(b) Enumerate the different cardiac function tests. Describe in detail cardiacTroponin-I test.

(c) What are proteins? Classify them with illustrative examples of each. Describe various protein precipitating agents and principles involved in precipitation.

4 Write notes on any **two** of the following : **8**

(a) IDDM

(b) Creatinine

(c) Differentiation tests of Jaundice.

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☛ **P. G. D. M. L. T.**

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5 (a) What are isoenzymes and isoforms? What is the clinical relevance of isoenzymes in the diagnosis of heart problems? **8**

(b) State the various disturbances of Acid Base balance. What are the laboratory findings in the various acid base disturbances?

(c) Enumerate the various methods for determination of urea and discuss about any two of them in detail.

6 Give principle and clinical significance of estimation of any **two** of the following : **8**

(a) Serum electrolytes

(b) Serum SGPT

(c) T_3T_4 TSH.

7 Answer any **two** of the following : **10**

(a) Enumerate the differences between enzymes and hormones and give the classification of hormones.

(b) Enumerate the tests used for biochemical measurements of Bone turnover and describe any one of them in detail.

(c) Enlist the various factors that affect variation of Plasma lipids and apolipoproteins. Discuss the turbidimetric method for determination of apolipoprotein AI.

8 Write short notes of any **three** of the following : **9**

(a) Serum Calcium

(b) Cholesterol

(c) Glucose

(d) Quality Control and Quality Assurance.
