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RR-0860-R

Third Year B. Sc. Examination

March / April – 2010

Medical Technology

(IDS - CAN Course)

(Instrumentation & Labo. Management)

Time : **3** Hours] [Total Marks : **70**

Instructions :

(1)

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

Name of the Examination :

☛ **T. Y. B. Sc.**

Name of the Subject :

☛ **Medical Technology (IDS-CAN Course)**

☛ Subject Code No. : **0 8 6 0** ☛ Section No. (1, 2,.....) : **Nil**

Seat No. :

Student's Signature

(2) Figures to the **right** indicate full marks of questions.

(3) Draw labelled diagram wherever necessary.

1 Answer the following in brief : **14**

(a) What are the applications of flurochromes?

(b) Define and explain : TEMED.

(c) Differentiate kinetic method and end point methods used in laboratory analysis.

(d) Give two limitations of haematology analyzer.

(e) What is meant by partition coefficient ?

(f) Which are the lense and illumination systems used in electrone microscopes.

2 Comment/Explain any **three** of the followings : **15**

(a) Proteins are separated by SDS-PAGE technique.

(b) Colorimeter differs from spectrophotometer.

(c) Ion-exchangers are working on the ionic strength of functional groups.

(d) Radioisotopes has varied applications in diagnostic laboratory.

(e) Laboratory management requires systemized approach.

3 Write an essay on : **10**

"Applications of chromatographic techniques and the instruments used for the diagnosis."

OR

"Autoanalyzers used for hematological measurements in laboratory diagnosis and its operation.

4 Answer any **two** of the following : **16**

(a) How will you organize a clinical laboratory? Which are the organizing principles used for it?

(b) What are the job profile of laboratory technologist and technicians at district central laboratory?

(c) Write down the principles, operation and functions of gamma counter along with its uses.

5 Write down short notes on any **three** of the following : **15**

(a) Isoelectric focusing

(b) Laboratory quality control measures

(c) Applications of Dark field microscope and the operational technique

(d) Organization and uses of laboratory instruments

(e) pH meter.
