2010

M.Sc.

1st Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—101 (UNIT—II)

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer *all* questions.

Module—I

(Quality Control of Laboratory Medicine)

[Marks : 20]

1. Answer any *five* of the following :   1×5

   (a) What do you mean by quality ?

   (b) What is the meaning of reproducible result ?

   (c) Write the formula of CV ?

   (d) What is systematic error ?

   (e) What is true value ?

   (f) What do you mean by laboratory accreditation ?

   (g) What is the significance of LG plot ?

   (h) What is statistical specificity ?

2. (a) What is the necessity of cusum chart?

(b) Blood glucose land for an individual for 6 consecutive days are 99, 102, 105, 98, 107, 100 mg/%. Find out the cusum value plot graphically & interpret your result.   1+(3+2+2)

Or

(a) What is control sera?

(b) What do you mean by accuracy?

(c) How do you calibrate a micropippette in the laboratory if you do not have any ~~mammal~~ *manual* of the company?

(d) Mention about the ideal mode of communication in TQM.   1+2+3+2

3. (a) 'External failure is the most serious consequence of poor quality' — Justify.

(b) How do you monitor the preanalytical variables in the laboratory?   4+3

Or

(a) For a diagnostic method the sensitivity is 90% where persons are with disease is 50, true positive (TP) is 60. Find the value of false negative (FN) result.

(b) Describe briefly how QLP is related to QI.   4+3

Module—II

(*Laboratory Management*)

[Marks : 20]

4. Answer any *five* of the following :.   1×5

   (a) Distinguish between controllable and non-controllable costs.

   (b) What do you mean by leadership ?

   (c) Distinguish between quality control and quality improvement.

   (d) What is PPBS ?

   (e) What is network analysis ?

   (f) Write any two major purposes of laboratory signae system.

   (g) What do you mean by management by objectives ?

   (h) What is input-output analysis ?

5. (a) What do you mean by PERT and CPM ?

   (b) Write the uses of PERT and CPM in managerial planning and control.

   (c) What is Cost effectiveness analysis ?   3+3+2

   Or

   (a) State the aims and objectives of marketing management.

   (b) How do you distinguish between line and staff functions ? Give reasons for distinguishing their roles in the business units.   3+(3+2)

6. (a) What is 'Cost-Benefit' analysis? Write the use of 'Cost-Benefit' analysis in laboratory and hospital.

(b) Explain the uses of break-even analysis in managerial decision making in a biomedical laboratory. (2+3)+2

Or

(a) What is laboratory management system?

(b) What are the essential factors for a standarized laboratory? 3+4

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