

**B.Sc. IN MEDICAL LABORATORY  
TECHNOLOGY (BMLT)/DIPLOMA IN  
MEDICAL LABORATORY TECHNOLOGY  
(DMLT)**

**Term-End Examination**

**December, 2013**

**BAHI-013 : AUTOMATION OF LABORATORY  
SERVICES**

*Time : 3 hours*

*Maximum Marks : 70*

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*Note : Attempt all questions. Follow instructions under each question.*

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**PART - A**

**Answer True or False :**

**1x5=5**

1. (a) Systemic errors can be detected by plotting chart within 2SD values.
- (b) Levy - Jenning chart and the Gaussian Curve indicates good control over the methodology
- (c) Internal quality control is performed by sending samples to interlaboratory at different times to monitor performance of the tests prospectively.
- (d) Optimum Condition Variance (OCV) is the lowest variance a laboratory can get on a known value Q.C. material.
- (e) Use of documentation in blood bank maintenance record as per S.O.P. will support Licensing authorities to penalise.

2. Fill in the blanks. 1x5=5
- (a) For quality control management it is essential to have written certified document as \_\_\_\_\_ in each laboratory.
  - (b) Internal Q.C and \_\_\_\_\_ Q.C are essential element of quality assessment.
  - (c) Coefficient of Variation (CV) is a measure of \_\_\_\_\_ variability.
  - (d) Instrument interfacing is done using \_\_\_\_\_ port on the instrument for the data reporting.
  - (e) Accuracy, Reliability and \_\_\_\_\_ are measures of quality assurance.
3. Write briefly on the following : 6x5=30
- (a) Organisational management
  - (b) NABL - Accreditation
  - (c) Factors affecting SOP preparation in quality management.
  - (d) Use of Levy - Jenning Chart and Gaussian curve
  - (e) Cusum chart
  - (f) Pre - requisites for blood bank license.

### PART - B

Answer any three questions : 10x3=30

4. Define quality control and quality assurance. What are parameters of check in pre and post analytical procedures of laboratory services ?
5. What are ethics of laboratory practices ? Describe objectives of laboratory practices in patient care services in relation to principles of ethics.

6. Describe the role of information technology in the field of Laboratory Medicine. Illustrate the role of computer technology in Laboratory Services.
  7. Describe the role of technical staff in medico - legal aspects of laboratory management.
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