

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

**Term-End Examination**

**December, 2017**

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

*Time : 3 hours*

*Maximum Marks : 70*

*Note : Attempt any six questions. Question no. 9 is compulsory.*

1. Describe the role of qualified technician in maintenance of quality assurance in the laboratory. Prepare the check list of quality assurance. 4+4=8
2. Describe advantages and disadvantages of automated quality analysers verses conventional methodology for laboratory investigations. 4+4=8
3. Describe the parameters for pre analytical procedures of quality management. 4+4=8
4. Discuss the parameters and conditions necessary in organisation of automation for qualified and accredited laboratory specialised in histotechnology and Haematology. 4+4=8
5. Define 'Random access' Analysers ? Give its examples and advantages. How does it differ from discrete selective analysers. 2+2+4=8

6. Explain why computers in laboratory are necessary in quality management ? Discuss computer assisted medical decision making and expert system (CADM). 3+5=8
7. Discuss ethics in laboratory practice. Explain how it is correlated to quality management of laboratories ? 3+5=8
8. Describe the role of standard operative procedures (SOP) in NABL accreditation. What are necessary components in SOP ? 4+4=8
9. Write short notes on any five of the following : 5x6=30
- (a) Cusum Chart. 6
  - (b) Quality control measures. 6
  - (c) External and Internal quality control programmes. 6
  - (d) OCV (Optimum Conditions Variance) and RCVK (Routine Conditions Variance Known Values). 6
  - (e) Selection of automated analysers in diagnostic haematology laboratories. 6
  - (f) Parameters of check in Total Quality Management (TQM). 6
  - (g) Information Technology. 6
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