



UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES
THIRD YEAR SECOND SEMESTER EXAMINATION- AUGUST 2017

MLSLR 3201 LABORATORY MANAGEMENT AND RECORD KEEPING

Date: 21.08.2017

Time: 2 Hours

ANSWER ALL EIGHT QUESTIONS.

ANSWER EACH PART IN SEPARATE ANSWER BOOKS

PART A

1. 1.1. What are the two main purposes of having quality assurance in a clinical laboratory? **(50 Marks)**
- 1.2. Briefly describe how an internal quality assessment can be carried out in a clinical laboratory? **(30 Marks)**
- 1.3. Enumerate the importance of a clinical laboratory **(20 Marks)**

2. Write short notes on
 - 2.1. Physical design of a clinical laboratory **(40 Marks)**
 - 2.2. Human resource management **(30 Marks)**
 - 2.3. Inventory card for chemicals **(30 Marks)**

3. 3.1. What is meant by Audit cycle in a clinical laboratory **(20 Marks)**
- 3.2. Briefly describe the aspects that could be assessed during laboratory audit in a clinical laboratory. **(50 Marks)**
- 3.3. Enumerate the role of a quality control officer in a clinical laboratory. **(30 Marks)**

4. 4.1. What is meant by "ISO and SLAB". **(20 Marks)**
- 4.2. Briefly describe ISO 15189 and CLSI standards **(50 Marks)**
- 4.3. Discuss the advantages of laboratory accreditation. **(30 Marks)**

PART B

5. 5.1. Define the term “Management”. (20 Marks)
- 5.2. Management functions are interrelated to achieve the performance of an organization? Explain these interrelated functions using a diagram? (30 Marks)
- 5.3. “A manager’s job is complex and multidimensional and requires a range of skills”.
Briefly explain the levels of management and the needed skills of a manager in an organization? (50Marks)
6. 6.1.Explain the scope and the importance of quantitative techniques in management? (30 Marks)
- 6.2 Briefly explain the limitations of quantitative techniques in management. (35 Marks)
- 6.3 Quantitative techniques are widely used in scientific management process.
Explain the areas where these techniques used? (35 Marks)
7. 7.1. Distinguish documentation and indexing. (20 Marks)
- 7.2. State the basic requirements of filing system and explain the effective ways to maintain the filing system in a laboratory. (40 Marks)
- 7.3. What is meant by “Decision Trees”? (10 Marks)
- 7.4. “Different decision environments can be identified depending upon the degree of certainty and the level of information”. Explain. (30 Marks)
8. 8.1. What do you understand by the term “budgeting”? (05 Marks)
- 8.2. Briefly explain the purposes of budgeting. (25 Marks)
- 8.3. Prepare a **cash budget** for the three months January, February and March based on the information given below;

Budgeted data are as follows:

	November	December	January	February	March
Sales (Units)	1500	1600	1600	1700	1800
Production (Units)	1600	1600	1700	1800	1900
Direct Labor and Variable Overheads incurred	Rs 96,000	Rs 96,000	Rs 102,000	Rs 108,000	Rs 112,000
Fixed Overheads incurred (Excluding depreciation)	Rs 40,000	Rs 40,000	Rs 40,000	Rs 40,000	Rs 40,000

The selling price per unit is Rs 400. The purchase price per kg of raw material is Rs 50. Each unit of finished product requires 4 kg of raw materials which are purchased on credit in the month before they are used in production. Suppliers of raw materials are paid one month after purchase. All sales are in credit. 80% of customers, by sales value pay one month after sale and the remainder pays two months after sale.

The direct labor cost, variable overheads and fixed overheads are paid in the month in which they are incurred.

Machinery costing Rs 200,000 will be delivered in February and paid for in March.

Depreciation, including that on the raw machinery, is as follows:

Machinery and Equipment	Rs 7,000 per month
Motor Vehicles	Rs 1600 per month

The opening cash balance at 1 January is estimated to be Rs 30,000.

(70 Marks)