



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
 B.Sc. Medical Laboratory Science Degree Programme
 Year End Examination - Year 3 - 6th Batch
 Laboratory Management (MLS 3103) – Theory (Essay)

Tuesday 1st August 2017 Time: 10.00 a.m. – 12.00 noon Duration: Two hours

Answer all the questions. Answer each question in a separate booklet.

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1.

1.1. Define the following terms.

- 1.1.1. Quality management
- 1.1.2. Internal quality control
- 1.1.3. External quality assurance

(30 marks)

1.2. You are the senior MLT at the Histopathology section of "Karapitiya Medical Laboratory".

1.2.1. Design a quality assurance plan for pre-analytical phase of your histopathology section.

(30 marks)

1.2.2. Briefly explain how you would manage the risks associated with the following.

- a) Section cutting
- b) Handling of hazardous chemicals

(40 marks)

2. A leading private sector laboratory, Laboratory 'A' has a specimen collection center (M) and three satellite laboratories (X, Y and Z) in addition to the central laboratory 'A'. Answer the following questions assuming that you are the laboratory manager of central laboratory A.

2.1. Most of the serum electrolyte samples collected by the center M show pseudohyperkalaemia. Briefly describe how you would correct this problem. (30 marks)

2.2. Laboratory X sends samples for hormone analysis to the central laboratory 'A'. In-charge of the Laboratory X complains that reporting is delayed and customers are not satisfied with the laboratory services. Briefly describe how you would manage this problem. (30 marks)

2.3. In-charge of the Laboratory Y suggested implementing urine culture and sensitivity testing at laboratory Y. State **five** important questions that you would ask from the laboratory manager of laboratory Y before implementing the urine culture and sensitivity testing. (20 marks)

2.4. In-charge of the Laboratory Z has forwarded his letter of resignation. Write down a job specification to be published in the newspapers for the vacant post. (20 marks)

3. You are the senior MLT in the Hematology section of the laboratory 'B'. You are planning to purchase a new automated hematology analyzer.

3.1. Considering the above situation explain,

3.1.1. why you need a written policy for purchasing equipment? *(30 marks)*

3.1.2. what are the factors that you would consider to include in this policy? *(30 marks)*

3.2. State how you are going to evaluate the performance of your new hematology analyzer.

(40 marks)

4.

4.1. Describe a Clinical Laboratory Collection Centre. *(40 marks)*

4.2. List **four** advantages of outsourcing. *(20 marks)*

4.3. Discuss the importance of supply chain management for a clinical laboratory. *(40 marks)*