



UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES
SECOND YEAR SECOND SEMESTER EXAMINATION – JANUAR 2013
MLSMT 2204 MEDICAL LABORATORY TECHNOLOGY 2

Paper II

Date: 28.01.2013

Time: 2.5 hours

ANSWER ALL EIGHT QUESTIONS

Answer part A and part B in a separate answer books

Part A

1.
 - 1.1 What is standard operating procedure (SOP)? (15 marks)
 - 1.2. How does SOP help in total quality management? (20 marks)
 - 1.3. What is meant by quality assurance? (20 marks)
 - 1.4. Mention two errors which influence the correctness of test results (10 marks)
 - 1.5. What will you do in pre analytical stage to improve the total quality management? (35 marks)

2.
 - 2.1. List the hormones used to assess the thyroid status (15 marks)
 - 2.2. Mention the function of each hormone mentioned above (15 marks)
 - 2.3. Mention the laboratory findings in primary hypothyroidism (20 marks)
 - 2.4. Mention the precaution you would take when collecting sample for thyroid function test in a patient who is on thyroxin (20 marks)
 - 2.5. List the sign and symptoms of hyperthyroidism (30 marks)

3.
 - 3.1. Mention three (3) causes of hepatitis (15 marks)
 - 3.2. List the components of liver function tests used to assess the liver damage (20 marks)
 - 3.3. Classify the jaundice (15 marks)
 - 3.4. Briefly describe the biochemical changes in each of the above types of jaundice (50 marks)

4.

- 4.1. List the causes for secondary diabetes mellitus (DM) (15 marks)
- 4.2. What do you understand by impaired glucose tolerance (20 marks)
- 4.3. Mention the laboratory criteria for the diagnosis of diabetes mellitus (30marks)
- 4.4. Mention the indications for oral glucose tolerance test (15 marks)
- 4.5. List the metabolic complications of DM and mention relevant investigations you would do to confirm them (20 marks)

Part B

5.

- 5.1. Mention the baseline investigations for male subfertility (10 marks)
- 5.2. List the basic tests done in the seminal fluid (SF) (30 marks)
- 5.3. How will you collect and transport SF for analysis (40 marks)
- 5.4. How will you perform a sperm count (20 marks)

6.

- 6.1 What is estimated Glomerular Filtration Rate (eGFR) (10 marks)
- 6.2. How will you classify the stages of chronic kidney disease based on eGFR (50 marks)
- 6.3. Briefly mention the method of urine collection for 24 hour creatinine clearance (CC) (15 marks)
- 6.4. What advice would you give to the patient during the urine collection (15 marks)
- 6.5. What are the factors that could affect 24 h CC (10 marks)



7.

7.1. Write a normal CSF report (40 marks)

7.2. Briefly mention how you will differentiate viral meningitis from bacterial
Meningitis (30 marks)

7.3. Mention three (3) stains used for CSF smear and give one indication for
each Stain (30 marks)

8. Write short notes on

8.1. Microalbuminuria (25 marks)

8.2. Stool for occult blood (25 marks)

8.3. Pregnancy test (25 marks)

8.4. Tuberculin test (25 marks)