



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

Faculty of Health, Applied Sciences and Natural Resources

Department of Health Sciences

QUALIFICATION: BACHELOR OF MEDICAL LABORATORY SCIENCES	
QUALIFICATION CODE: 08BMLS	LEVEL: 8
COURSE: INTRODUCTION TO MEDICAL LABORATORY SCIENCES	COURSE CODE: IML511S
DATE: JULY 2022	SESSION: THEORY
DURATION: 3 HOURS	MARKS: 100

SUPPLEMENTARY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Ms Roselin Tsauses
MODERATOR:	Ms Fredrika Engelbrecht

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer all questions.2. Please write neatly and legibly.3. Do not use the left side margin of the exam paper. This must be allowed for the examiner.4. No books, notes and other additional aids are allowed.5. Mark all answers clearly with their respective question numbers.

Permissible material

Non programmable calculator is allowed.

THIS QUESTION PAPER CONSISTS OF 3 PAGES (Excluding this front page)

Section A (10 marks)

Question 1

[10]

1. Suggest the correct additive (where possible) for each of the following medical tests. Where there is no additive, indicate "none."
 - 1.1 Full Blood Count (FBC) (1)
 - 1.2 Liver Function Tests (LFT) (1)
 - 1.3 Coagulation studies (1)
 - 1.4 Lupus erythematosus (LE) cells (1)
 - 1.5 Thyroid Function Tests (TFT) (1)
 - 1.6 Erythrocyte Sedimentation Rate (ESR) (1)
 - 1.7 RPR (rapid plasma reagin) test (1)
 - 1.8 Urea & Electrolytes (1)
 - 1.9 Glucose (1)
 - 1.10 CD4 test (1)

Section B (35 marks)

Question 2

[12]

- 2.1 Name the Councils of the Health Professions Councils of Namibia. (5)
- 2.2 Identify the Council under which the profession of Medical Laboratory Sciences falls? (1)
- 2.3 Explain what is meant by “maintaining of registration” with the respective Council by a registered person. (3)
- 2.4 What is the role of the Secretariat and what does it comprise of? (3)

Question 3

[23]

- 3.1 Give a brief description of each department found under the two branches of pathology. Present your answer in form of a table. (10)
- 3.2 Define the term “incineration” and briefly highlight its importance in the medical laboratory. (3)
- 3.3 What is a Medical Laboratory Scientist? Explain in your own words. (4)
- 3.4 Compare the advantages with the disadvantages of automation in the clinical laboratory. Present your answer in a table. (6)

Section C (25 marks)

Question 4

[12]

- 4.1 Discuss the factors that can affect the quality of blood specimen testing. (8)
- 4.2 What is the clinical significance of collecting a ‘first morning’ urine sample? (1)
- 4.3 Explain the principle of qualitative urine pregnancy tests. (3)

Question 5

[13]

- 5.1 Tabulate any four (4) laboratory equipment and describe its function. (8)
- 5.2 Discuss the safety measures you would take to protect yourself if you are working in the TB department. (5)

Section D (30 marks)

Question 6

[21]

- 6.1 Assess the following scenarios and suggest what resulting action(s) you would take by giving a reason in each case:
- 6.1.1 You are working in reception in the laboratory and is about to enter patients' details in the laboratory management system. You only see the sample, but cannot locate the laboratory request form. (3)
- 6.1.2 You are busy running patients' samples; however, you see a continuous movement of values in one direction over six or more analytical runs. (7)
- 6.2 What is indicated by control values that fall out of range in the chemistry department? (5)
- 6.3 Name three (3) random errors that can occur in the clinical laboratory. For each error, suggest an appropriate solution. (6)

Question 7

[9]

- 7.1 Explain what you understand by the term "order of draw" used during phlebotomy? (2)
- 7.2 Tabulate the general "order of draw" for the samples collected for laboratory analysis. Refer to the stopper colors to answer this question. (7)

The End - Good Luck!