



**NAMIBIA 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: 7
COURSE: MEDICAL LABORATORY MANAGEMENT	COURSE CODE: MLM711S
DATE: June 2022	SESSION:
DURATION: 3 Hours	MARKS: 120

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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MODERATOR:	Dr Vincent Nowaseb

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 8 PAGES (Including this front page)

SECTION A (60 MARKS)

QUESTION 1

[20]

Evaluate the statements in each numbered question and select the most appropriate answer or phrase from the given possibilities. Write the appropriate letter next to the number of the statement/phrase. ONE mark for each correct answer.

- 1.1 The following is not one of the main functions of a professional association:
- A. To set and control standards for education of professionals
 - B. To develop and promote the interests of the members
 - C. To promote good working conditions for members
 - D. To provide opportunities for continuous professional development
 - E. To promote the status and recognition of the profession
- 1.2 The entire chain of storage facilities and transportation links through which supplies move from the manufacturer to the consumer:
- A. Lead time
 - B. Pipeline
 - C. Review period
 - D. Point of order
- 1.3 A type of budget which is continuous and updated periodically:
- A. Flexible budget
 - B. Program budget
 - C. Capital budget
 - D. Rolling budget
 - E. Revenue budget
- 1.4 The following is true when making business decisions:
- A. When cost increases, profit will decrease
 - B. When cost increases, profit will increase
 - C. When volumes increase, profit and cost will decrease
 - D. When cost increases, profit will stay the same
- 1.5 The following does not apply to cash flow:
- A. Begin with net income
 - B. Subtract non-cash expenses (depreciation and amortization)
 - C. Subtract debt service (loan back payment)
 - D. The gross income of the laboratory (before subtractions) is available to spend on capital items

- 1.6 The number of cases that existed in a population over a given time period:
- A. Incidence
 - B. Prevalence
 - C. Point prevalence
 - D. Epidemic
- 1.7 Information which is in the form of data:
- A. Can lead to an increase in uncertainty
 - B. Can lead to a decrease in understanding
 - C. Can lead to a decrease in uncertainty and an increase in understanding
 - D. Need not be presented within a context that gives it meaning and relevance
- 1.8 The following question need not be considered during problem solution and feedback:
- A. Who needs to know of this decision?
 - B. What action must be taken?
 - C. Who is to take the action?
 - D. Is the action feasible?
 - E. Will all staff members agree with the solution?
- 1.9 During the problem-solving process the next step to take after problem identification:
- A. Criteria establishment
 - B. Decision making
 - C. Problem analysis
 - D. Problem solution and feedback
- 1.10 When developing a QC programme, you need not include the following in the comprehensive training programme:
- A. How to use control materials and prepare them for use
 - B. How to calculate the mean and standard deviation from known QC data over time
 - C. How to interpret QC patterns e.g. shifts
 - D. Error that requires immediate action and error that does not require immediate action
 - E. The criteria for selection of QC material

- 1.11 The following is not an attribute of the consensus method for decision-making:
- A. This is the centerpiece of effective teams
 - B. Requires unity
 - C. Requires unanimity
 - D. Concurrence occurs, but not consistency
 - E. Everyone agrees to support the outcome
- 1.12 Problem solution and feedback is converting the decision into action. The next step in the process after the written action plan has been completed:
- A. Assign responsibility
 - B. Identify detailed steps to be taken
 - C. Identify resources required
 - D. Implement monitoring loop
- 1.13 The following is true about innovators in their problem-solving style:
- A. Focused on resolving problems
 - B. Rarely challenge rules: methodical, reliable and efficient
 - C. Use logic and analysis and ask "Why"
 - D. Question current practice and promote change
- 1.14 This is not a commercial control product:
- A. In-kit controls
 - B. Instrument manufacturer controls
 - C. Patient pools
 - D. Independent third-party controls
- 1.15 The following is not true about function checks on an instrument as part of the maintenance programme:
- A. Part of daily maintenance eg. cleaning of optical lenses
 - B. Monitoring of instrument parameters to verify that your equipment is working according to the manufacturer's specification
 - C. Performed periodically – daily, weekly, monthly
 - D. Performed after major instrument repair
- 1.16 Job descriptions include all of the following except:
- A. Qualifications required
 - B. Supervisory controls
 - C. Technical details
 - D. Statement of duties to perform

- 1.17 The following is true regarding performance management, except:
- A. Conducted only upon request
 - B. A 4-point scale is appropriate
 - C. Involves the employee and supervisor
 - D. There are two types: criteria and competency based
- 1.18 The employee evaluation instrument should relate to:
- A. A job description
 - B. Performance standards
 - C. Reward system
 - D. A and C
 - E. All of the above
- 1.19 Advantages of excellent communication and interpersonal skills include:
- A. All employees understand the direction of the organization
 - B. Speeds up the decision process
 - C. Creates proactive behavior
 - D. Improves all working relationships
 - E. All of the above
- 1.20 In order to calculate the negative predictive value of a test you need to consider the following values:
- A. True positive and true negative
 - B. True positive and false positive
 - C. False negative and true negative
 - D. True positive and false negative
 - E. False positive and true negative

QUESTION 2

[20]

Match each term in the first column with the correct description in the second column. Only write the number and the letter. (Two marks each)

Procurement term	Description
2.1. Review period	A. The entire chain of storage facilities from manufacturer to consumer
2.2. Emergency order point	B. When an order must be placed to avoid a stock out regardless of whether it is the end of review period
2.3. Lead time	C. Stock level above which inventory levels should not rise under normal conditions
2.4. Pipeline	D. Stock previously ordered but not yet received

2.5. Minimum stock level	E. Between ordering of stock and when stock is ready for use
2.6. Maximum stock level	F. The time schedule for reviewing stock levels
2.7. Safety stock	G. Stock level when actions should occur to replenish stock
2.8. Average monthly consumption	H. A system that ensures that quantities in stock fall in an established range
2.9. Quantity on order	I. Average quantities used in most recent three or six months
2.10. Maximum-minimum Inventory control system	J. Reserve stock kept on hand to protect against stock outs

QUESTION 3

[20]

- 3.1 Explain what determines the type of group involvement from members in a group when a decision needs to be taken? (4)
- 3.2 Describe the “5-Why” approach to problem solving (4)
- 3.3 Discuss the decision-making style of innovators and list two characteristics of innovators (5)
- 3.4 List what is achieved with a good equipment management programme. (5)
- 3.5 Define the efficiency of a diagnostic test. (2)

SECTION B (60 MARKS)

QUESTION 4

[10]

- 4.1 Name the four (4) criteria which a job must meet to be classified as a profession. (4)
- 4.2 Justify why it is necessary for a Medical Laboratory Scientist to hold a professional registration. (4)
- 4.3 The administrator requests information from all departments regarding detailed laboratory information. As laboratory manager, you respond with a short memo. The administrator emails you, indicating that your response was inadequate. Which type of written communication would have been appropriate and why? (2)

QUESTION 9

[10]

Defend the following statement: 'Human capital is a more valuable asset than equipment in a medical laboratory'. Justify your answer.

End of question paper. Good luck!