



"Investing in Africa's Future"

COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

DEPARTMENT OF BIOMEDICAL AND LABORATORY SCIENCES

BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS

NSLS 300 LABORATORY MANAGEMENT AND ADMINISTRATION

END OF FIRST SEMESTER FINAL EXAMINATION

NOVEMBER 2023

LECTURER: Dr S. MUTAMBU

DURATION: 3 HOURS

INSTRUCTIONS

1. Write your candidate number on the space provided on top of each page
2. Answer **all** questions in sections A on the question paper.
3. Answer **all** questions in section B on separate answer sheets provided.
4. Answer any **2** questions in section C on separate answer sheets provided
5. The mark allocation for each question is indicated at the end of the question
6. Credit will be given for logical, systematic and neat presentations in sections B and C

SECTION A: TRUE (T) OR FALSE (F) QUESTIONS [20 MARKS]

Answer **all** questions by encircling the correct response **T** for **TRUE** or **F** for **FALSE** for each statement in all the questions. Each correct response is allocated a quarter mark.

1. The benefits of a Quality Management System (QMS) include:

- | | | |
|---|---|--|
| T | F | a) Laboratory accreditation |
| T | F | b) Improved customer satisfaction |
| T | F | c) Improved quality of products and services |
| T | F | d) Better management and a more technical organization |

2. Medical Laboratory Services are important to all aspects of health care and they should produce results that are:

- | | | |
|---|---|--------------|
| T | F | a) Accurate |
| T | F | b) Technical |
| T | F | c) Reliable |
| T | F | d) Timely |

3. Power is a tool used by a leader to influence subordinates to follow him/her to achieve the goals of the organisation. Listed below are some of the classes of power:

- | | | |
|---|---|-----------------------|
| T | F | a) Reward power |
| T | F | b) Disciplinary power |
| T | F | c) Legitimate power |
| T | F | d) Expert power |

4. Some of the features of a Laboratory Information Management System are:

- | | | |
|---|---|----------------------------------|
| T | F | a) Instrument Integration |
| T | F | b) Distribution Location Manager |
| T | F | c) Billing / Charge Manager |
| T | F | d) Central Control Manager |

5. Each of the following is a statement on the outcome of job analysis:

- | | | |
|---|---|--------------------------|
| T | F | a) Performance appraisal |
| T | F | b) Job description |
| T | F | c) Job specification |
| T | F | d) Job evaluation |

6. Aims of a Laboratory Information Management System (LIMS) are to:

- | | | |
|---|---|--|
| T | F | a) Enhance the quality of data and accessibility |
| T | F | b) Improve laboratory throughput |
| T | F | c) Increase clerical work by skilled scientists |
| T | F | d) Increase customer confidence |

7. In financial management, laboratory managers should:

- | | | |
|---|---|--|
| T | F | a) Use data from past minutes to prepare budgets |
| T | F | b) Understand sources of cost information |
| T | F | c) Determine workload of each laboratory scientist |
| T | F | d) Know the cost of each test |

8. The following are part of revenue of a clinical laboratory:

- T F a) Reagent purchases
- T F b) Salaries
- T F c) Waste disposal payments
- T F d) Processing tests for another laboratory

9. The following statement describes an organogram:

- T F a) Organizational chart
- T F b) Recruitment method
- T F c) Relative ranks
- T F d) relationships

10. The following visual aids are useful for effective presentation:

- T F a) Flip charts
- T F b) Pictures
- T F c) Word Point
- T F d) Videos

11. The following are methods of staff motivation:

- T F a) Setting clear mission and vision statements
- T F b) Adopting a transparent performance management system
- T F c) Implementing team approach to problem solving
- T F d) Recruitment of a dedicated team of employees

12. The following are key elements of good leadership:

- T F a) Vision
- T F b) Charm
- T F c) A good sense of humour
- T F d) Curiosity

13. Financial ratios important to a laboratory manager include:

- T F a) Cost per test
- T F b) Labour cost per test
- T F c) Profit margin per billable test
- T F d) Workload per laboratory scientist

14. The process of monitoring performance, comparing it with goals and correcting any significant deviations is known as:

- T F a) Planning
- T F b) Organizing
- T F c) Leading
- T F d) Evaluating

15. The selection of an individual who is best suited to a particular position and to the organization from a group of potential applicants includes:

- T F a) Planning
- T F b) Recruitment
- T F c) Enrolment
- T F d) Staffing

CANDIDATE NUMBER

16. The functions of communication are to:

- | | | |
|---|---|-------------|
| T | F | a) Control |
| T | F | b) Motivate |
| T | F | c) Educate |
| T | F | d) Regulate |

17. Management is a set of the following processes:

- | | | |
|---|---|--------------------|
| T | F | a) Planning |
| T | F | b) Budgeting |
| T | F | c) Problem solving |
| T | F | d) Commanding |

18. A laboratory manager is an honest person who understands how to motivate employees and possess the following skill(s):

- | | | |
|---|---|------------------|
| T | F | a) Sales |
| T | F | b) Interpersonal |
| T | F | c) Managerial |
| T | F | d) Technical |

19. The following are barriers to effective communication:

- | | | |
|---|---|----------------------------|
| T | F | a) Language |
| T | F | b) Selective participation |
| T | F | c) Emotions |
| T | F | d) Filtering |

20. Which one is not a factor in the demand for change to electronic-based records?

- | | | |
|---|---|---|
| T | F | a) Need for saving paper |
| T | F | b) Need for coordination of care |
| T | F | c) Rising health care costs |
| T | F | d) Need for reduction of turn-around times` |

SECTION B: SHORT ANSWERS [40 MARKS]

Answer all questions in this section on separate answer sheets provided.

- 1. Is management an Art or a Science? Giving examples, discuss this statement in detail. (10 marks)**
- 2. Briefly discuss the consequences that can result from the issuance of inaccurate results from the Medical Laboratory. (10 marks)**
- 3. For laboratories to function effectively, they must have sufficient commodities needed for the testing services offered. Effective supply management practices help ensure commodity availability.**

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- a) Briefly explain Supply Chain Management in the Medical Laboratory. **(5 marks)**
 - b) State five rights for Stock Management? **(5 marks)**
4. In an organization, a Personnel Manager has to undertake the exercise of job analysis so as to pick the right man for the right job. One of the outcomes of a job analysis is job description.
- a) Briefly discuss the key facts that are related to a job and constitute a job description. **(5 marks)**
 - b) What are the advantages of a job description? **(5 marks)**

SECTION C: LONG ESSAY ANSWERS [40 MARKS]

Answer any 2 questions from this section on separate answer sheets provided.

1. Giving examples specific to the Medical Laboratory environment, discuss in detail the different leadership styles defined in the Blake-Mouton Model (1964) which is also called the Managerial Grid Model. **(20 marks)**
2. Giving examples, compare and contrast the features of medical documents and medical records. **(20 marks)**
3. Effective business communication skills are key to a company's success and productivity. Write a detailed account on how this statement applies to the Medical Laboratory Services. **(20 marks)**
4. Discuss in detail the framework of the 12 Quality System Essentials (QSE) that is recommended by WHO to control, assure and manage the quality of Medical Laboratory's processes. **(20 marks)**