

CANDIDATE NUMBER.....

*"Investing in Africa's Future"*

**COLLEGE OF HEALTH, AGRICULTURE AND NATURAL
SCIENCES
DEPARTMENT OF BIOMEDICAL AND LABORATORY SCIENCES
BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS**

NSLS300: LABORATORY MANAGEMENT AND ADMINISTRATION**END OF SEMESTER FINAL EXAMINATIONS****NOVEMBER 2022****LECTURER: DR S. MUTAMBU****DURATION: 3 HOURS**

INSTRUCTIONS

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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 **3** 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
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SECTION A: MULTIPLE CHOICE [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. 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) Reliable
T	F	c) Technical
T	F	d) Timely

2. The consequences of inaccurate test results can be very significant and they include:

T	F	a) Failure to provide the proper treatment
T	F	b) Delay in correct diagnosis
T	F	c) Additional and necessary diagnostic testing
T	F	d) Treatment complications

3. Management is an art in the sense that:

T	F	a) There is great room for the use of creativity, imagination, initiative and invention within the overall sphere of the occupation
T	F	b) It includes skills that can be measured, for example in applied sciences like chemistry, physics and medical sciences
T	F	c) It includes communication skills, motivation and directives
T	F	d) There are precise elements, scientific and exact aspects that have to be learned and assimilated

4. 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

5. 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

6. 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

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- T F c) Determine workload of each laboratory scientist
 T F d) Know the cost of each test

7. 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

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

- T F a) Instrument Integration
 T F b) Storage Location Manager
 T F c) Billing / Charge Manager
 T F d) Standards and Reagent Manager

9. 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

10. Characteristics of a good leader include:

- T F a) Integrity
 T F b) Charm
 T F c) Trust
 T F d) Curiosity

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 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

13. 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) Reduce clerical work by skilled scientists
 T F d) Increase compliance to GLP, FDA regulations and ISO Standards

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14. The following are key elements of good leadership:

- | | | |
|---|---|---------------------------|
| T | F | a) Vision |
| T | F | b) Character |
| T | F | c) A good sense of humour |
| T | F | d) Authoritativeness |

15. 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 |

16. 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 |

17. 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 |

18. The following are 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 |

19. 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 |

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

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

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Answer **all questions** on separate answer sheets provided.

1. Briefly outline the objectives of performance appraisal [5]
2. Name at least the 5 rights for stock management? [5]
3. State the benefits of a Quality management System (QMS) in a medical laboratory.[5]
4. Briefly explain supply chain management in the medical laboratory [5]

SECTION C: [60 MARKS]

Answer any **3 questions** from this section on separate answer sheets provided.

1. Discuss in detail the PDCA cycle of management. [20]
2. Giving examples that relate to the medical laboratory environment, discuss the main principles of any Organisational Theory of Management of your choice [20]
3. Discuss in detail the challenges that managers face in the quantification and procurement of medical laboratory commodities. How would you address these challenges? [20]
4. Effective business communication skills are key to a company's success and productivity. Write a detailed account on this statement. [20]
5. In your own words discuss the following aspects of Laboratory Personnel Management:
 - a) Job description [10]
 - b) Performance appraisal [10]

THE END