

AUGUST 2023
EBS 366
LABORATORY MANAGEMENT AND SAFETY
2 HOURS

Candidate's Index Number
Signature:

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
INSTITUTE OF EDUCATION

COLLEGES OF EDUCATION
FOUR-YEAR BACHELOR OF EDUCATION (B.ED)
THIRD YEAR, END-OF-FIRST SEMESTER EXAMINATION, AUGUST 2023

14TH AUGUST 2023 LABORATORY MANAGEMENT AND SAFETY 2:00 PM – 2:30 PM

This paper consists of two sections, A and B. Answer ALL the questions in Section A and TWO questions from Section B. Section A will be collected after the first 30 minutes.

SECTION A
(20 MARKS)

Answer ALL questions in this Section.

Items 1 to 20 are stems followed by four options lettered A to D. Read each item carefully and circle the letter of the correct or best option.

1. The organization and collection of diverse individuals with different needs identifies management as activity.
 - A. business
 - B. cooperation
 - C. group
 - D. individual
2. Management is a function and has to adapt itself to the changing environment.
 - A. continuous
 - B. demanding
 - C. dynamic
 - D. static
3. A computer laboratory is important in every private and government school to
 - A. enhance the scientific and technological research and invention capacity of students.
 - B. help structured learning environments where students/workers can prepare for a tech-heavy future.
 - C. provide time and space to develop skills not directly related to classroom curriculum.
 - D. to promote completion among students or workers.

4. Which of the following is **not** a constituent of a Computer Laboratory?
 - A. A printer
 - B. Fire Extinguisher
 - C. Palmtop
 - D. Projector

5. Which of the following is **not** an objective of management.
 - A. Improving performance.
 - B. Mobilizing best talent.
 - C. Planning for future.
 - D. Produce raw materials.

6. Management is a continuous process. Choose the odd one!
 - A. Directing
 - B. Organizing
 - C. Planning
 - D. Transforming

7. The following make Computer Laboratories still relevant or beneficial **except**
 - A. does not offer learning advantages regarding mobility.
 - B. modern computer labs promote collaboration.
 - C. school computer labs ensure equitable access.
 - D. school computer labs supplement classroom learning great computing power.

8. Computer Laboratory Development is divided into number of stages.
 - A. 3
 - B. 4
 - C. 5
 - D. 6

9. Which of these is **not** among the stages of Computer Laboratory Development? stage
 - A. Design
 - B. Operation and Maintenance
 - C. Processing
 - D. Requirement

10. Which of the following is **not** part of the requirement analysis process?
 - A. Cost estimate consideration.
 - B. Define the requirements and prototypes for the lab.
 - C. Evaluate the alternatives and prioritize the requirements.
 - D. Gather, analyse and validate the information.

11. The **most** important aspect that will run throughout all the stages of Computer Laboratory Development is termed
 - A. cost analysis.
 - B. documentation.
 - C. implementations.
 - D. stakeholder's involvement.

12. Lab management supports the development and implementation of
 - A. extortion.
 - B. regulation.
 - C. theft.
 - D. vandalism.

13. This is the stage for the purchase of the various items identified, setting them up and testing them to ensure that they are functional and fit for purposes for which the lab is being established. Which of these is the statement referring to stage.
- A. design
 - B. implementation
 - C. operation and maintenance
 - D. requirement analysis
14. The application of management principles in the day to day running of ICT tools and equipment is designated as a computer laboratory. Computer Laboratory
- A. Assessment
 - B. Management
 - C. Science
 - D. Technology
15. The following are Tactical and Operational Roles of a Lab Manager **except**
- A. information management.
 - B. inventory management.
 - C. resources acquisition and management.
 - D. reviewing regulatory requirements.
16. The purpose of decision-making is to
- A. choosing the best alternative out of many available ones.
 - B. direct human behaviour, resources and commitment towards a future goal.
 - C. impose rules and regulations on human behaviour.
 - D. teach workers their daily activities.
17. According to Louis A. Allen, "Decision-making is the"
- A. actual selection from among alternatives of a course of action.
 - B. process of making choices by identifying a decision, gathering information, and assessing alternative resolutions.
 - C. selection based on some criteria from two or more possible alternatives.
 - D. work which a manager performs to arrive at conclusion and judgement.
18. Which of the following is **not** part of the component of computer system?
- A. Firmware
 - B. Hardware
 - C. Middleware
 - D. Software
19. The physical part of the computer, like the system memory and disk drive is
- A. firmware.
 - B. hardware.
 - C. middleware.
 - D. software.
20. All these can cause hearing impairment **except**
- A. listening to a particular sound for a long period.
 - B. overusing ear buds/earphones/headset.
 - C. sitting too close to sound devices.
 - D. using the phones over a long period.

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SECTION B
[40 MARKS]

Answer any TWO questions from this Section.

1.
 - a. What is ergonomics? [2 marks]
 - b. Outline **three** benefits of ergonomics. [3 marks]
 - c. Mention any **four** purposes of computer laboratory in schools. [2 marks]
 - d. Identify **five** useful things that a learner can do at the computer laboratory. [5 marks]
 - e. Explain The following ergonomics domains of specialization. [3 marks]
 - i. Physical Ergonomic
 - ii. Cognitive Ergonomics
 - iii. Organizational Ergonomics

2.
 - a. Explain Computer laboratory [2 marks]
 - b. Briefly explain any **three** relevance of computer laboratory [3 marks]
 - c. Mention any **four** purposes of computer laboratory in schools [4 marks]
 - d. List **six** constituent of a computer laboratory [6 marks]
 - e. Describe **four** functions of a laboratory manager. [4 marks]
 - f. Mention any **three** things that must be considered in laboratory policy [1 mark]

3.

- a. What is computer Security? [2 marks]
- b. Explain the following computer security terms [3 marks]
 - i. Confidentiality
 - ii. Integrity
 - iii. Availability
- c. What are computer security threats? [3 marks]
- d. Mention any **four** importance of computer security [4 marks]
- e. Explain the following computer Security types. [8 marks]
 - i. Information security
 - ii. Cybersecurity
 - iii. Application security
 - iv. Network security