



# TECHNICAL UNIVERSITY OF MOMBASA

*Faculty of Applied and Health Sciences*

DEPARTMENT OF MEDICAL SCIENCES

DIPLOMA IN MEDICAL LABORATORY SCIENCES  
(DMLS 11M)

## **AML 2260 : RESEARCH METHODS**

**SPECIAL/SUPPLEMENTARY:** EXAMINATIONS

**SERIES:** JULY 2013

**TIME:** 2 HOURS

### INSTRUCTIONS:

You should have the following for this examination

- *Answer booklet*

Question one is compulsory, then answer TWO questions

### **Question ONE**

- a) Discuss the ethical guidelines with regards to the following
  - (i) Researcher
  - (ii) Research involving human participants

**(10marks)**
- b) Outline essential steps involved in searching for secondary data. **(8marks)**
- c) Explain the importance of research in the modern world **(6marks)**
- d) Discuss any THREE possible risks that may occur in the course of a research process **(6marks)**

### **Question TWO**

- a) Briefly explain the significance of sampling in research process. **(8marks)**
- b) Explain how the following could be sources of error in a research process
  - (i) Researcher
  - (ii) Respondent
  - (iii) Instrument used
  - (iv) Situational factors

**(12marks)**

### **Question THREE**

- a) Highlight the qualities of
  - (i) A good research topic
  - (ii) A good questionnaire

**(14marks)**
- b) Explain any FOUR sources of primary data **(8marks)**

### **Question FOUR**

- a) Discuss the qualities of a good research design. **(8marks)**
- b) Explain the limitation for each of the following data collection methods
  - i) Questionnaire
  - ii) Interview
  - iii) Observation

**(6marks)**
- c) Define the following types of sampling techniques
  - (i) Systematic sampling
  - (ii) Stratified sampling
  - (iii) Proportionate sampling

**(6marks)**

### **Question FIVE**

Discuss the risk management plan as applied in clinical research process. **(20marks)**