



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF **PURE AND APPLIED SCIENCES**

DIPLOMA IN INDUSTRIAL MICROBIOLOGY AND BIOTECHNOLOGY
DIPLOMA IN ANALYTICAL CHEMISTRY
(DIMBT 11M / DAC 11M)

AAB 2204: RESEARCH METHOD

SPECIAL/SUPPLEMENTARY: EXAMINATIONS

SERIES: February 2013

TIME: 2 HOURS

INSTRUCTIONS:

You should have the following for this paper

- *Answer booklet*

This paper consists of **FIVE** questions.

Answer Question **ONE (compulsory)** and any other **TWO** questions

This paper consists of 2 PRINTED pages

Question ONE

- a) (i) Differentiate primary sources of literature from secondary sources of literature. (4marks)
- (ii) Give the TWO steps in identifying a research problem. (4marks)
- b) (i) What is an objective as applied in a research proposal. (2marks)
- (ii) State the meaning of “SMART” as applied in objectives. (5marks)
- c) (i) Give FOUR components of a methodology section of a research (4marks)
- (ii) What is a null hypothesis. (2marks)
- (iii) Differentiate applied research from action research. (4marks)
- d) State FIVE ways of identifying a specific research problem from the broad area. (5marks)

Question TWO

- a) Define the following terms as applied in research:
- (i) Sample
- (ii) Data
- (iii) Variable
- (iv) Statistics (8marks)
- b) Differentiate probability sampling from non probability sampling and give two examples in each. (7marks)

Question THREE

- a) (i) Explain the meaning of research. (2marks)
- (ii) State FIVE purposes of research. (5marks)
- b) Briefly explain FOUR sources of knowledge that can be used in research. (8marks)

Question FOUR

Briefly explain fifteen components of a research proposal. (15marks)

Question FIVE

- a) (i) Give FOUR factors that determine the scope of a research study. (4marks)
- (ii) Describe error in the research process and state how it arrives. (4marks)
- b) State seven example sources of literature information for a research. (7marks)