TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BTAC

AAB 4301: RESEARCH METHODOLOGY

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE:

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of 5 questions. Attempt question ONE compulsory and any other two questions.
Do not write on the question paper.

Question ONE

a) Define the following terms as used in research

(i)	Variable	(1mark)
(ii)	Experimental group	(1mark)
(iii)	Control group	(1 mark)
(iv)	Research design	(1 mark)
(v)	Sampling	(1 mark)

b) State **Three** objectives of research   (3 marks)

c) Highlight **Three** characteristics of a good research hypothesis   (3marks)

d) Distinguish the following terms

(i) Theory and Hypothesis   (2marks)

(ii) Descriptive and inferential statistics   (2 marks)

e) Describe the techniques of defining a research problem   (5marks)

f) Explain the measurement errors in research   (4marks)

g) Describe **Three** strategies used in quantitative research   (3marks)

h) Explain the main ethical principles that need to be considered in research   (3 marks)

Question TWO

a) Discuss the methods used in data collection in research (12 marks)

b) Describe measures of relationships often used in the context of research (8marks

Question THREE

a) Describe the steps involved in data processing   (8 marks)

b) Compare Quantitative and qualitative research   (12marks)

Question FOUR

a) Describe the probability sampling methods, citing the advantages and disadvantages of each method (8 marks)

b) Discuss the problems facing empirical scientific researchers in Kenya   (12marks)

Question FIVE

(i) Explain the measures of dispersion in the context of research   (10 marks)

(ii) Describe the methods used in data presentation in research   (10 marks)