TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY
(DICT 12S/EV)

ECT 2206: RESEARCH METHODS

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: OCTOBER 2014
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
      - *Answer Booklet*
This paper consists of **FIVE** questions.
Attempt question **ONE (Compulsory)** and any other **TWO** questions
Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

a) Define a research proposal and explain TWO types of research proposal. **(5 marks)**

b) Differentiate between closed and open ended questionnaires. **(2 marks)**

c) Give the steps followed in formulating a research topic. **(2 marks)**

d) State and explain TWO types of hypothesis. **(4 marks)**

e) Give the importance of data collection. **(2 marks)**

f) Outline the significance of research proposal **(3 marks)**

Question Two

a) Briefly describe the following research design:
  (i) Basic research
  (ii) Historical research
  (iii) Applied research **(6 marks)**

b) Define the phrase "problem statement" in a research problem. **(2 marks)**

c) State and explain FIVE factors considered when formulating a research problem. **(5 marks)**

d) State FOUR problems researchers face during research. **(4 marks)**

e) State the importance of formulating an hypothesis. **(2 marks)**

Question Three

a) Differentiate between independent and dependent variables. **(4 marks)**

b) State and explain FOUR problems that researchers face during literature review. **(4 marks)**

c) Differentiate between limitation and delimitation in research. **(2 marks)**

d) Give FIVE reasons of conducting a research. **(10 marks)**

Question Four

a) Differentiate between the purpose of study and justification of the study in a research proposal.
(4 marks)

b) Discuss THREE data collection methods. **(6 marks)**

c) Describe the steps of research process. **(10 marks)**

Question Five

a) State and explain TWO types of sampling. **(2 marks)**

b) Explain FOUR driving factors to conduct a research. **(4 marks)**

c) State and explain the types of research according to method of analysis and according to type of data collected. **(4 marks)**

d) Briefly explain the content of a research proposal. **(10 marks)**