(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR FOUR SEMESTER ONE EXAMINATIONS

FOR THE DEGREE OF
BACHELOR OF SCIENCE
(INFORMATION TECHNOLOGY)

COURSE CODE   :   BIT 224

COURSE TITLE   :   RESEARCH METHODS AND TECHNICAL WRITING IN COMPUTING.

DATE: 20/05/2019   TIME: 2.00P.M. – 4.00P.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

a. Differentiate between the following terminologies as used in Research Methods   [6 marks]

    i.   Sample and Population

    ii.   Research and Research Methodology

    iii.   Paraphrasing and Summarising

b. State and explain any **FIVE** sources of research ideas to a prospective researcher.   [5 marks]

c. Differentiate between primary data and secondary data. Giving an example for each case.

    [4 marks]

d. Explain ways in which questionnaires can be administered.   [4 marks]

e. Outline any **FIVE** disadvantages of using interviews as a research tool   [5 marks]

f. Explain the **TWO** basic types of sampling procedures. Give examples in each case.   [6 marks]

QUESTION TWO [20 MARKS]

Masomo Hodari is a village polytechnic within North Eastern Region. The administration is concerned with low enrolment in the institution. Preliminary investigation attributed the low enrolment to factors: Poor exam results, Fee increment, Exodus of teachers and Corporal Punishment being administered on students.

    i.   Identify and clearly state the research problem in this situation?   [4 Marks]

    ii.   If you were the researcher tasked to carry out the study, what is the appropriate research topic would have given to the study?   [2 Marks]

    iii.   As a researcher identify three specific objectives you would have focused on in the study

    [3 Marks]

    iv.   List the Variables in this context and clearly label them.   [4 marks]

    v.   Formulate TWO null hypotheses for this study.   [3 marks]

    vi.   If you were the researcher tasked to carry out the study, describe the main steps you would follow.   [5 marks]

QUESTION THREE [20 MARKS]

a. A Postgraduate student has decided to conduct research on "**Security Threats and Vulnerabilities Mitigation in Information Systems Security for Public Universities in Kenya**". He/ She has hired you as the research assistant. Highlight any **FIVE** ethical issues you will consider when conducting the research   [10 marks]

b. There are various tools of data collection. As such a researcher must judiciously select the appropriate tool for his/her own study, briefly explain factors to be considered when choosing a data collection tool [10 marks]

QUESTION FOUR [20 MARKS]

a. Research design is a glue that holds the content of the research together. Outline and discuss various types of research design [10 Marks]

b. Explain the Importance of research in the field of computing. [10 Marks]

QUESTION FIVE [20 MARKS]

a. Explain any FIVE purposes of hypotheses in research [10 Marks]

b. Discuss the importance of Literature review in information Technology once you have decided on your research problem. [5 Marks]

c. Distinguish between quantitative and qualitative research. [5 Marks]