



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR DEGREE IN:
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
(BSIT 12S)

BIT 2301/EIT 4309: RESEARCH METHODS/METHODOLOGY

END OF SEMESTER EXAMINATION
SERIES: APRIL 2015
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) Discuss the software development cycle **(8 marks)**
- b) Describe the process of identification of gaps in knowledge in research **(4 marks)**
- c) Discuss research findings validity concerns **(8 marks)**
- d) Describe any FOUR research classifications by purpose **(8 marks)**

e) Outline any FOUR types of research proposals (2 marks)

Question Two

Write a research proposal for the development of a school information management system software. (20 marks)

Question Three

Discuss the key data collection methods that are commonly used in ICT research (20 marks)

Question Four

Discuss the research process “onion” (20 marks)

Question Five

a) Discuss the importance of carrying out a literature review during research (10 marks)

b) Distinguish between Reference list and bibliography (4 marks)

c) Describe any THREE popular data analysis softwares (6 marks)