



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

### (A Constituent College of JKUAT) (A Centre of Excellence)

# Faculty of Engineering &

# Technology

# **DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

# **UNIVERSITY EXAMINATION FOR DEGREE IN BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY** (BTIT/M11)

# **EIT 4309: RESEARCH METHODS**

## SPECIAL/SUPPLEMENTARY EXAMINATION SERIES: OCTOBER 2012 TIME: 2 HOURS

#### **Instructions to Candidates:**

You should have the following for this examination - Answer Booklet This paper consist of **FIVE** questions Answer question **ONE** and any other **TWO** questions Maximum marks for each part of a question are as shown This paper consists of **TWO** printed pages

## SECTION A (COMPULSORY)

### **Question One (30 marks)**

a) Outline <b>FOUR</b> characteristics of a good research question.	(4 marks)
b) Distinguish between references and bibliographies	(4 marks)
c) Differentiate between a research proposal and a research report.	(4 marks)
<ul> <li>d) Define the following terms as applied in research method:</li> <li>i) Quantitative Research</li> <li>ii) Historical Research</li> <li>iii) Qualitative Research</li> </ul>	
iv) Descriptive Research	(8 marks)

- e) (i) Define Literature Review. (ii) Explain **TWO** types of skills that are gained and can be demonstrated in writing literature review (5 marks) (i) Define a research problem f) (ii) Outline **THREE** elements of a potential research situation. (5 marks) **SECTION B (Answer Any Two Questions) Question Two (20 marks)** Describe in details any FIVE common research strategies. (20 marks) **Question Three (20 marks)** You have identified a research problem that you wish to pursue. **Required:** i) Describe **FOUR** things that the literature review should do. ii) Describe the questions that you would ask yourself in coming up with a good literature review. (20 marks) **Question Four (20 marks)** Describe **FIVE** key components of the research process "onion" (20 marks) **Question Five (20 marks)** You have been told that there is an organization that is funding research projects in your area of study. **REQUIRED:** 
  - i) Describe in detail **FIVE** factors that you would consider in identifying the research problem. (10 marks)
  - ii) Explain **FIVE** questions that you are likely to ask yourself while justifying the selected research problem. (10 marks)