

TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR DEGREE IN:

BACHELOR OF SCIENCE IN STATISTICS & COMPUTER SCIENCE BACHELOR OF MATHEMATICS & COMPUTER SCIENCE (BSSC 13S-FT & BMCS 13S-FT)

EIT 4250: OBJECT ORIENTED PROGRAMMING II

END OF SEMESTER EXAMINATION SERIES: DECEMBER 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) State any TWO Java API features for implementing GUI programs.

(4 marks)

- **b)** Distinguish between the following:
 - (i) Event object and listener object
 - (ii) Event driven programming and object oriented programming
 - (iii) JFrame and JPanel object marks)

(6

c) Develop a java class called student with the following members:

Data members, Reg No, Name, Contact, Method Members, Getters, Setters, Constructor

(10 marks)

- **d)** Briefly explain any THREE characteristics of object oriented programming **(6 marks)**
- e) State any FOUR features of JFrame Window (4 marks)

Question Two

- **a)** Develop a GUI program that has two buttons: OK and QUIT buttons the program should be executable (12 marks)
- **b)** Describe any FOUR programming paradigms (8 marks)

Question Three

Develop a GUI program that implements the GUI shown below:

DELETE

Question Four

- **a)** Briefly explain the following terms:
 - (i) Layout manager
 - (ii) Container
 - (iii) Window
 - (iv)Constructor

(v) Polymorphism

(10 marks)

b) Briefly explain any FIVE member methods of the Jframe class

(10 marks)

Question Five

- a) Describe the following types of layout mangers:
 - (i) Border layout
 - (ii) Flow layout
 - (iii) Grid Layout

(12 marks)

- b) Distinguish between the following concepts:
 - (i) JFrame and JPanel
 - (ii) Window and Class
 - (iii) Listener and event handler
 - (iv)Border Layout () and Border Layout

(8 marks)