



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

*Faculty of Engineering & Technology*

DEPARTMENT COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION & COMMUNICATION TECHNOLOGY  
(DICT 2K 11M/DICT 11M)

**EIT 2108/ECT 2107: EVENT-DRIVEN PROGRAMMING**

END OF SEMESTER EXAMINATIONS

**SERIES: DECEMBER 2011**

**TIME: 2 HOURS**

## **Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions in **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

## SECTION A (COMPULSORY)

### Question 1 - 20 Marks

a) Explain the following terms

- (i) Visual programming
- (ii) Event driven programming [4 marks]

b) Briefly describe each of the following Integrated Development( IDE) features;

- (i) Toolbox
- (ii) Control
- (iii) Form
- (iv) Title bar [8 marks]

c) Write a VB program to read a student name and the score for a particular subject. The program should output grades as shown:-

- Above 90 'A'
- 80 – 89 'B'
- 70 - 79 'C'
- 60 – 69 'D'
- Below 60 'FAIL' [8 marks]

## SECTION B (ANSWER ANY TWO QUESTIONS)

### **Question 2 (20 marks)**

- a) Draw a flowchart to calculate the sum of twenty integer values. Use a loop. (10 marks)
- b) Implement (a) above using Visual Basic programming language. (10 marks)

### **Question 3 (20 marks)**

- a) With an example explain the **two** control structures used by Visual Basic programming language. (10 marks)
- b) Write a temperature conversion program that converts a Fahrenheit temperature to a Celsius temperature. Provide a **TextBox** for user input and a **Label** for displaying the converted temperature. Provide a **Input** button to read the value from the **TextBox**. Also provide the user with an **Exit** button to end program execution. Use the following formula:  $Celsius = 5/9x(Fahrenheit-32)$ . [10 marks]

### **Question 4 (20 marks)**

a) Explain the uses of the following properties of a **Data Control**.

- (i) Database name
- (ii) Record source
- (iii) Field name
- (iv) Data source [8 marks]

- b) Describe how you can connect to an MS ACCESS database file called “**student.mdb**” from a VB project. (10 marks)
- c) Explain the term Object-oriented programming (2marks)

**Question 5 (20 marks)**

- a) Explain the uses of the following controls
- (i) List box
  - (ii) Text box
  - (iii) Check box
  - (iv) Combo box
- (8 marks)
- b) Explain the term data security. (2 marks)
- c) Write a VB program that will accept the username and password from the user. If the user is “JOHN” and password is “9999” then the user is given access but if username and password are incorrect the user is denied access. (8 marks)