



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

*Faculty of Engineering & Technology*

DEPARTMENT COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY - DICT10

**ECS 2206: EVENT DRIVEN PROGRAMMING I**

SPECIAL/SUPPLEMENTARY EXAMINATION

**SERIES: FEBRUARY/MARCH 2012**

**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 One 30 Marks

- a) Outline the steps involved in setting up a start up form in Visual Basic 6.0 (3 Marks)
- b) Write a Visual Basic code to load a picture residing at C:\OurImages\Student.jpeg on a named instance of an image control on a form (3 Marks)
- c) Write a Visual Basic code to declare a fixed-size array specifying its limits (2 Marks)
- d) State the syntax for the **Input Box()** method and explain its arguments (5 Marks)
- e) Write down the syntax for opening a sequential file for output (2 Marks)
- f) Outline the steps involved in creating a dynamic array in Visual Basic 6.0 (3 Marks)
- g) Name and explain three categories of errors in Visual Basic (6 Marks)
- h) List any **six (6)** error numbers associated with errors in Visual Basic and describe them (6 Marks)

## SECTION B (Answer any two questions)

### Question Two

- a) Define a breakpoint (2 marks)
- b) Outline three (3) debugging strategies you can use in a Visual Basic 6.0 (6 Marks)
- c) State the syntax for the **MsgBox()** method and explain its arguments (5 Marks)
- d) Write a Visual Basic code to declare a multidimensional array specifying its limits (2 Marks)
- e) What is an MDI and what is it used for? (2 Marks)
- f) Using a piece of code, show how one can increase the size of a dynamic array without losing its contents (3 Marks)

### Question Three

- a) List **any six (6)** date and time functions used in Visual Basic 6.0 clearly showing the extracted portion of each (3 Marks)
- b) State and explain **any six (6)** TextBox event procedures you can use in Visual Basic 6.0 (6 Marks)
- c) List **three** types of controls (3 Marks)
- d) Differentiate between **DateValue ()** and **TimeValue()** functions as used in Visual Basic 6.0 (2 Marks)
- e) What is the use of the **TabIndex** property of controls (2 Marks)
- f) Define a Visual Basic function to return the area of a triangle to the calling routine (4 marks)

### Question Four

- a) Differentiate between Procedural programming and Event Driven programming (2 Marks)
- b) Given that an image exists in C:\Images\ClassBitmap.img, write a one line of code to show it on a **named instance** of PictureBox control (3 Marks)
- c) What is the use of a Timer Control? (2 Marks)
- d) Write a Visual Basic code to add the following items on a **ListBox** control: **Class A, Class B, Class C** in that order upon a click of a command button named **cmdAddItem** (4 Marks)

e) State and explain three styles of ComboBox as used in Visual Basic 6.0 (6 Marks)

f) Highlight three (3) advantages of using Control Array in Visual Basic (3 Marks)

**Question Five**

a) What is a Control Array? (1 Mark)

b) Using an appropriate pieces of code, differentiate between a **function** and a **procedure** (5 Marks)

c) Write a function procedure to add two numbers and return the sum to the caller (4 Marks)

d) Write a function procedure to return the factorial of any number passed to it. An error message should be returned to the caller if non numbers are fed to the procedure (10 Marks)