



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION TECHNOLOGY (DIT 10M)

ECS 2206: EVENT DRIVEN PROGRAMMING

END OF SEMESTER EXAMINATIONS

SERIES: AUGUST/SEPTEMBER 2011

TIME: 2 HOURS

Instructions to Candidates:

Answers **MUST** be written clearly within the answer booklets provided with the exam paper

Answer question **ONE** and any other **TWO** questions from the list of questions below

Unless otherwise stated, all codes and or code stubs **MUST** adhere to Visual Basic Programming language syntax and semantics

This paper consists of **THREE** printed pages

SECTION A (30 marks)

Question 1 (Compulsory)

- a) Explain the term even as applied to programming (3 marks)
- b) Give **FOUR** examples of event in respect to Visual Basic Programming (3 marks)
- c) What is the difference between a PictureBox and Image controls (2 marks)
- d) Write a function procedure to add two numbers and return their sum to the calling module (4 marks)
- e) Differentiate between Standard module, form module and class module (3 marks)
- f) Explain any **FOUR** components of Visual Basic's Integrated Development Environment (IDE) (8 marks)
- g) Write a statement to create a dynamic array in Visual Basic 6.0 (2 marks)
- h) Explain **THREE** categories of errors in Visual Basic (6 marks)
- i) Using examples differentiate between *implicit* and *explicit* declarations (2 marks)

SECTION A (40 marks)

Question 2 (20 marks)

- a) Name and briefly describe **TWO** logical data operators of Visual Basic(4 marks)
- b) What is the difference between Integer Division (I) and Mod data operators (2 marks)
- c) Outline **FOUR** variable naming conventions used in Visual Basic (4 marks)
- d) What is the use of the statement *Option Explicit*? Where is it declared (3 marks)
- e) Differentiate local and public variables (2 marks)
- f) What is the difference between a sub and function procedures (2 marks)
- g) Name **SIX** numeric data types of Visual Basic specify the amount of space allocated to each of them (3 marks)

Question 3 (20 marks)

- a) Explain the following properties of controls
 - (i) Visible
 - (ii) Caption
 - (iii) Text(3 marks)

- b) What are static variables? What are they used for? How are they declared (3 marks)
- c) Define the general syntax of **If...Then...Else** selection structure (2 marks)
- d) Name and briefly explain **FIVE** categories of procedures used in Visual Basic (10 marks)
- e) Stat the difference between a static and dynamic arrays (2 marks)

Question 4 (20 marks)

- a) Outline **TWO** benefits of using procedures in programming (2 marks)
- b) Explain the differences between Do while....**Loop and Do....Loop While** (2 marks)
- c) Name and briefly explain two types of arrays used in Visual Basic programming (4 marks)
- d) Explain the difference between a function and a procedure (2 marks)
- e) State any **FOUR** predefined constants in Visual Basic (2 marks)
- f) Giving an example, name the function you would use to cast a variable to Error, String, Variant and Decimal types in Visual Basic 6.0 (4 marks)
- g) Explain the term control. List **THREE** categories of controls used in Visual Basic 6.0 (4 marks)

Question 5 (20 marks)

- a) Explain the use of **SelLength, SelStart and SelText** properties of the **TextBox** control (3 marks)
- b) List and explain any **THREE** date functions used in Visual Basic 6.0 (3 marks)
- c) State the difference between **CheckBox** and **OptionButton** controls (2 marks)
- d) Write Visual Basic code to remove a second item from a list control (3 marks)
- e) Highlight **THREE** advantages of Control Array in Visual Basic (3 marks)
- f) Differentiate between **DirListBox, DriveListBox** and **FileListBox** control (3 marks)
- g) Using a piece of code, differentiate between Load and Show methods of a form object (3 marks)