



THE TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY
DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY (DICT)

ECS 2107: EVENT DRIVEN PROGRAMMING

END OF SEMESTER EXAMINATION

SERIES: APRIL 2013

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

This paper consists of **FIVE** questions. Attempt 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

Question One (Compulsory)

- a) Explain the following terms:
- (i) Structured programming
 - (ii) Event driven programming (4 marks)
- b) Briefly describe each of the following Integrated Development Environment (IDE) features:
- (i) Properties window
 - (ii) Project explorer
 - (iii) Tool box
 - (iv) Form (8 marks)
- c) Draw a program flowchart to read three integer values, compare them and display the smallest. (8 marks)

Question Two

- a) With examples explain the **THREE** control structures in Visual Basic Programming Language. (14 marks)
- b) Explain any **THREE** types of errors in computer programming. (6 marks)

Question Three

- a) Draw a flow chart to calculate the sum and average of 100 natural numbers. Use a loop. (10 marks)
- b) Implement Q3 (a) above using Visual Basic Programming language. (10 marks)

Question Four

- 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 program portability. (2 marks)

Question Five

- a) Write a VB program to read Fahrenheit temperature and convert the reading to degrees centigrade.
Given $C = (F - 32) \frac{5}{9}$ (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 “PETER” and password is “4444” then the user is given access but if username and password are incorrect the user is denied access. (10 marks)