



TECHNICAL UNIVERSITY OF MOMBASA
Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

ADVANCED CERTIFICATE IN INFORMATION TECHNOLOGY

EIT 1128: COMPUTER PROGRAMMING II

SUPPLEMENTARY/SPECIAL EXAMINATIONS

SERIES: FEBRUARY 2013

TIME: 2 HOURS

INSTRUCTIONS:

- You should have the following for this examination:
Answer booklet
- This paper consists of **FIVE** questions.
- Answer question **ONE (Compulsory)** and any other **TWO** questions.

This paper consists of Three printed pages.

QUESTION 1

- a) Draw a flowchart to calculate the sum of ten integer values. Use a loop. **(10 marks)**
b) Implement Q 1(a) above using Visual Basic Programming language. **(10 marks)**

QUESTION 2

- a) Explain the following terms:
i) Object-Oriented 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
- c) Write a C program to read a student name and the score for a particular subject. The program should output grade as shown:
Above 90 "A"
80 – 89 "B"
70 – 79 "C"
60 – 69 "D"
Below 60 "Fail" **(8 marks)**

QUESTION 3

- 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 VB project. **(10 marks)**

QUESTION 4

- a) Explain the uses of the following controls:
i) List Box
ii) TextBox

- iii) CheckBox
- iv) ComboBox

(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)**

QUESTION 5

- a) Explain the **TWO** control structures by Visual Basic Programming Language. **(10 marks)**
- b) Write a 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 = $5/9 \times$
(Fahrenheit – 32) **(10 marks)**