



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 2K 10J

ECS 2212: VISUAL BASIC PROGRAMMING

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: OCTOBER 2011

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer booklet*

Answer question **ONE (COMPULSORY)** in section A and any other **TWO** questions from section B

Maximum marks for each part of a question are clearly shown.

This paper consists of **THREE** printed pages

SECTION A – Compulsory

Question 1

a) Explain the use of the following objects:

- i) Combo box
- ii) Radio button
- iii) Check box
- iv) List box

[4 Marks]

b) Explain the four methods

[2 Marks]

c) Explain the four move methods

[2 Marks]

d) Distinguish between seek method and find method

[4 Marks]

e) Explain run time error giving a suitable example

[2 Marks]

f) Write a general format of a Visual Basic procedure to show how to trap un time error

[4 Marks]

g) Distinguish between ‘scope of variable’ and ‘life time of variable’

[4 Marks]

h) Explain ‘static variable’

[2 Marks]

i) Explain the use of the following Visual Basic functions giving a suitable example:

- i) isnumeric()
- ii) Ubound()
- iii) Ccur()

[6 Marks]

SECTION B (ANSWER ANY TWO QUESTIONS)

Question 2

a) Describe the scope of variables in Visual Basic, giving suitable example for each case [4 Marks]

b) Explain the following two properties of the Err object in Visual Basic:

- i) Number
- ii) Description

[4 Marks]

c) Explain the purpose of the three windows mentioned in 2c above

[6 Marks]

d) Explain the use of goto statement in Visual Basic

[1 Mark]

Question 3

a) Explain the term ‘DLL’ and state its advantage

[4 Marks]

b) Write a statement to declare static array to store names of employees.

[1 Marks]

c) Write a Visual Basic procedure to store names of 10 employees and their phone extension number in an array. Write another function that will accept employee name, search the array and return the employee’s extension number if found in the array else return an appropriate message.

[10 Marks]

Question 4

a) A college offers three types of hostel accommodations:

- Self contained room at sh. 9,000.00 per semester
- Sharing 2 persons at sh. 7,500.00 per semester
- Dormitory at sh. 4,500.00 per semester

A student has option of receiving laundry services costing sh. 3,000.00 per semester.

Design a Visual Basic interface that can be used to calculate a student had to pay for hostel. The interface should contain radio button, check box and command button. Write a procedure that will calculate to hostel fees of a student and attach it to a command button **[8 Marks]**

b) HR department has decided to store information about its employees in a random access file. The following information is needed to be stored:

Field	Data type	Number of Characters
Name	String	15
Emp. Number	String	1
Gender	String	1
Basic Salary	Currency	
House Allowance	Currency	
Medical Allowance	Currency	

Write a Visual Basic program to store the data of 10 employees in a random file.

[7 Marks]

Question 5

a) An employee database contains a table named employee whose structure is shown below:

Field	Data type	Number of Characters
Name	String	15
Emp. Number	String	1
Gender	String	1
Basic Salary	Currency	
House Allowance	Currency	
Medical Allowance	Currency	

Write a Visual Basic procedure that will accept Employee Number form user and search the table for the employee. If the record if found the procedure should display employee name and gender. Assume that the program is using data object and has been configured to point to the table. **[8 Marks]**

a) List any three type of record sets

[3 Marks]

b) Explain the following methods of passing arguments:

- i) By value
- ii) By reference

[4 Marks]