



TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION

TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DICT/ SEP/ 2018

ECS 2202: EVENT-DRIVEN PROGRAMMING

END OF SEMESTER EXAMINATION

SERIES: AUGUST2019

TIME: 2HOURS

DATE: Pick DateSelect MonthPick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

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

Do not write on the question paper.

Question One

a. Differentiate between the following data types in Visual Basic programming language.

I. **Boolean**

II. **Decimal**

(4 marks)

b. Develop a program segment that creates a user-defined data type called *Employee* to store

name, date of birth, hire date for a worker •

(5 Marks)

c. Explain the following Visual Basic commands

i) Inputbox()

ii) MsgBox()

(4 marks)

d. Write an application that converts a Celsius temperature, C, to its equivalent Fahrenheit temperature. Use the following formula:

$$F = \frac{9}{5}C + 32$$

(7 marks)

QUESTION TWO

a). Explain any three control structures in Visual Basic Programming language and provide an example where appropriate

[10 Marks]

b). Write a Visual Basic program to read basic salary and sales made by employees. The program should calculate the commission based on the table below. It should output the commission and the netsalary

Netsalary=Basic salary + commission

SALES	COMMISSION(% OF SALES)
0 - 1000	0%
1000 – 20000	8%
20000 – 30000	12%
OVER 30000	17%

(10 Marks)

Question Three

a.Explain the following computer programming paradigms:

- I. Web scripting programming
- II. Object oriented programming
- III. Event-driven programming

(6 marks)

b. A School is interested in computerizing their students grading system which is as follows; Use the **Select Case...End Select** Structure.

Marks	Grade
A	"High Distinction"
B	" Distinction"
C	"Credit"
D	"Pass"

Otherwise	"Fail"
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i) Explain the **Select Case...End Select** as used in Visual Basic Programming language .

(2 Marks)

ii) Implement Q3b(i) above using the **Select Case...End Select** as used in Visual Basic Programming language .

(8 marks)

c. Explain any two logical operators

(4 marks)

Question Four

a. Write a VB statement that represent each of the For..Next conditions given.

i) Change the control variable from 1 to 100 in increments of 1.

ii) change the control variable from 100 to 1 in *decrements* of 1.

iii) Change the control variable from 7 to 77 in increments of 7.

(6 marks)

b. Describe the term **ADO.NET** as used in Visual Basic programming.:

(6 marks)

c. Describe the *DataGridView* Control as used in database programming.

(4 marks)

d. Explain any two functions of SQL in database programming

Question Five

(a) Describe the following terms

(i) Dynamic data structure

(ii) Static data structure

(6 marks)

(iii) State any four operations of data structures

(4 marks)

(b) Write a Visual Basic Program to read FIVE Integer in an Array called score, then display then display them in ascending order.

(10 marks)