



UNIVERSITY EXAMINATIONS 2016/2017
ORDINARY EXAMINATION FOR BSC ACTUARIAL SCIENCE
CAU2205 INFORMATION MANAGEMENT FOR ACTUARIES
(EVENING & WEEKEND)

DATE: APRIL, 2017

TIME: 2 HOURS

INSTRUCTIONS: Answer question ONE and Any other TWO questions

QUESTION ONE (30 MARKS)

a) Discuss the following types of programming languages:

- | | |
|--------------------------|-----------|
| i) Machine Language | (3 Marks) |
| ii) Assembly Language | (3 Marks) |
| iii) High level Language | (3 Marks) |

b) Discuss the use of the following objects

- | | |
|----------------------------|-----------|
| i) Menu bar | (2 Marks) |
| ii) The Toolbar | (2 Marks) |
| iii) The Form | (2 Marks) |
| iv) The Form Layout window | (2 Marks) |

c) Spear Ltd company pays its employees as follows;

basic pay

number of days worked X rate of pay

Allowances

Transport allowance

1% of basic salary

House allowance

2% of basic salary

Deductions

NSSF

2.5 % OF gross pay

PAYE
excess of 10,164)

3% of gross pay (for workers earning gross pay in

Required

Draw a flow chart to compute the pay

(8 Marks)

d) Explain the following characteristics of a good programming language

ABSTRACTIONand**EFFICIENCY**

(5 Marks)

QUESTION TWO

a) Using suitable examples Outline what the following functions perform when used in a visual basic program

- i. UCase(variable) (2 Marks)
- ii. LCase(variable) (2 Marks)
- iii. StrConv(variable, vbProperCase) (2 Marks)
- iv. Left(variable,#) (2 Marks)
- v. Right(variable,#) (2 Marks)
- vi. Len(variable) (2 Marks)

b) What will be the output of the following code when it is executed?

(5 Marks)

```
Dim age As Integer = 42
Select Case age
Case Is >= 0
    txtBox.Text = "Child"
Case Is >= 13
    txtBox.Text = "Teenager"
Case Is >= 21
    txtBox.Text = "Young Adult"
Case Is >= 40
    txtBox.Text = "Middle Age"
Case Is >=65
    txtBox.Text = "Old Person"
```

```

Case Else
    txtBox.Text = "Not Human"
End Select

```

C) State the three types of Visual Basic operators are: (3 Marks)

QUESTION THREE

a) Write a set of statement that will give the output in the table below. (5 Marks)

Marks	grade
0-49	Fail
50-60	Pass
61-74	Merit
75-100	distinction

b) Write a code which accepts names of 5 cities and add them to a combo Box. (5 Marks)

c) State and explain three types are three types of translators. (3 Marks)

d) Explain the stages followed in application program development when developing a new program. (7 Marks)

QUESTION FOUR

a) State and explain **five** program **design aims** that a programmer will take into account when writing a program. (10 Marks)

b) In a certain cafeteria, clients have to select their choice from three available options.

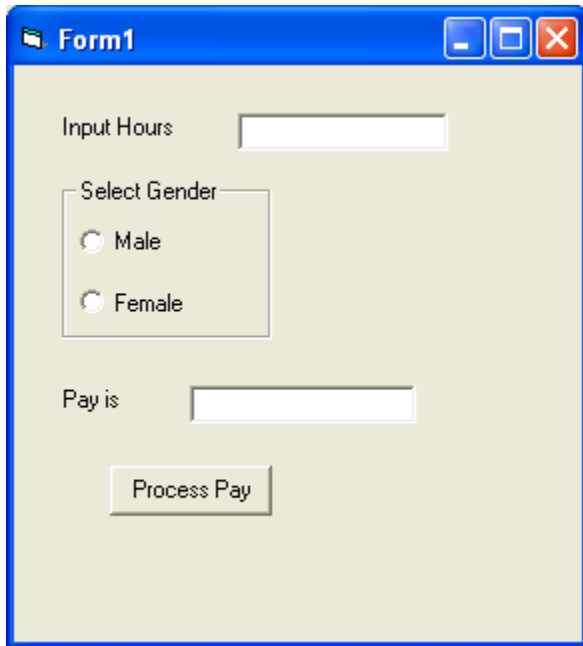
Write a program that would help to print out the client requirements. (10 Marks)



QUESTION FIVE

- a) In XYZ Co. the average rate per hour is shs 100. However female workers are paid at two times the normal rate. Write a visual basic program that would help compute the pay.

(6 Marks)



- b) Using suitable examples write simple code that will be executed by the following loops/repetitive statements

:

- i) Do while ... Loop (3 Marks)
- ii) Do Loop While (3 Marks)
- iii) Do Until Loop (3 Marks)
- iv) Do..... Loop Until condition (3 Marks)
- v) For Next (3 Marks)