

## CHANS

COURSE TITLE: CIS202– Introduction to Programming

2nd SEMESTER: FINAL EXAMINATION 2019

LECTURER: MR J. CHINZVENDE

TIME: 3 HOURS

# **INSTRUCTIONS**

Marks are given at the end of each question [Marks]

Start **each** question on a new page.

The marks allocated to **each** question are shown at the end of the section.

Answer all questions in Section A and Chose Three in section B

Credit will be awarded for logical, systematic and neat presentations.

## Section A

- 1. Define the following terms as they are used in Programming
  - a. Debugging
  - b. Algorithm
  - c. Operator
  - d. BASIC
  - e. Encapsulation

- f. Inheritance
- g. Namespace
- h. Variable
- i. Pseudo code j.
  - Flow chart

## 2. What is the difference between the following?

	<b>v</b>
FUNCTION	DESCRIPTION
e.g. Asc	Returns the character code on the first letter in a string.
LCase	
Left	
	Gives the length of a string.
	Removes spaces from the beginning of a string.
RTrim	

[10]

[10]

- 3. What is the function of the following in visual basic programming?
  - a. Forms
  - b. Controls
  - c. Methods
  - d. Properties
  - e. Module

[10]

- 4. Grace wants to design a Visual Basic Program that accepts two numbers, compares them and then outputs the larger number.
  - a. Draw a Flow Chart
  - b. Design an algorithm to solve this problem
  - c. Design the user interface with three text boxes, labels and a command button
  - d. Write the code to perform the process on the button. [10]

### **SECTION B (Answer any three questions) Question One**

- a. Describe the three steps in designing a visual basic program
- b. Name the three modes in which Visual Basic operates in
- c. Write code on for program below

Hultilicatio	n	
5	<b>X</b> 4	= 20
		Calculate

[20]

### Question two

Г

a Match the following terms and their definitions:

1. Developer	A collection of data organized in a manner that allows access, retrieval, and use of that data
2. <b>Dim</b> statement	Someone skilled in designing computer programs
3. Visual C#	A window with a variety of objects that can be displayed
4. Graphical user interface	Used for Declaring a variable
5. Database	Programming language

- b. A loop inside another loop is called a \_\_\_\_\_\_.
- c. Explain object oriented programming concepts with advantages.

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#### **Question Three**

i. What do the following operators mean in VB programming?

Operator	Meaning
+	Addition
-	
*	
/	
٨	
Mod	

```
ii. Private Sub btnDisplay_Click(...) Handels btnDisplay.Click
Dim word1, word2, newWord As String
word1 = "memory" word2 = "feather"
newWord = word1 + & word2
If newWord.Length > 3 Then
txtBox.Text = newWord
Else
txtBox.Text = "Sorry, not found."
End If
End Sub
a. What is the output of the code above
b. What error handling statement can on the sub routine above? [20]
```

#### **Question four**

i. Write a Dim statement for each of the following variables using the variable type and variable name that would be best for each value.

- a. The population of the state of Alaska
- b. Your weekly pay
- c. The smallest data type you can use for your age
- d. A constant for the first initial of your first name
- e. The minimum wage
- f. The name of the city in which you live
- g. The answer to a true/false question

ii. What are the principals of user interface design

## [20]

#### **Question Five**

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i. Determine if each of the following variable names is valid or invalid. Please state the error in the invalid variable names.

j.	aintRadian	d. R743-L56
	b. PercentOfSales#	e. 3CPO
	<pre>c. first_Input_Value</pre>	

Discuss the stages of Programme development life cycle. [20]