## **COLLEGE OF ENGINEERING & TECHNOLOGY**



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Course : Introduction To Programming

Course No. : CC114

## Sheet 3 Variables & Arithmetic Opertaions

Q1. Choose the correct answer:				
1.	The opera	tor performs integer div	vision. c) Mod	d) ^
2.	Every variable has a . a) name		c) value	d) all of the above
3.		netic expressions must b) top-bottom	be written in	form. d) right-left
4.	Arithmetic expressions are evaluated			b) from left to right d) Both b and c
5.	Variable declarations a) Declare	in event handlers begin b) Sub	with the keyword c) Dim	d) Integer
6.	Entering a value in a Ta) TextAltered		nt c) ValueChanged	d) TextChanged
7.		tion converts user inpu b) MakeDouble	t from a TextBox to a valu c) Val	ue of type Double. d) WriteDouble
8.	The data type in a variable declaration is immediately preceded by keyword			
9.	The expression int $X$ . a) $\setminus$	b) /	s the remainder afetr intX c) Mod	is divided by intY. d) None of the above
10.	Given $Q = c + \frac{2 a^3 - 9}{27}$	a b, which of the follow	wing is the correct stateme	ent for this equation?
	a) $Q = C + 2*a^3 / 27 - 9*a*b$ c) $Q = C + (2*a^3 - 9*a*b) \times 27$		b) $Q = (C + 2*a^3) / 27 - 9*a*b$ d) $Q = C + (2*a^3 - 9*a*b)/27$	

Q2. For the following Visual Basic statement, determine the output value

```
Dim A,B,C,D,E,F,G As Double
A=6
B=5.5
D=11
C=60
D=23
E=10
F=4
G=A+B/C*D^2-F/E
```

**Q3.** What value would be stored in an integer variable "i" as a result of the following calculation?

```
Const j As Integer = 100
Dim i As Integer
i = 7 + 3 * j Mod (J - 50)
```

Q4. What will be the value of intAnswer after execution of there statements?

```
Const intNumA As Integer = 6
Const intNumB As Integer = 4
Const intNumC As Integer = 2
intAnswer = intNumA + intNumB * intNumC
```

**Q5.** This code modifies variables number1, number2 and result. What are the final values of these variables?

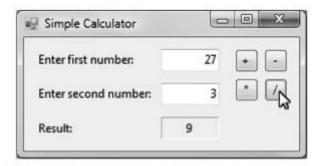
```
Dim number1 As Integer
Dim number2 As Integer
Dim result As Integer
number1 = 5 * (4 + 6)
number2 = 2 ^ 2
result = number1 \ number2
```

**Q6.** Find the error(s) in the following code, which uses variables to perform a calculation.

```
Dim number1 As Integer
Dim number2 As Integer
Dim result As Integer

number1 = (4 * 6 \land 4) / (10 \text{ Mod } 4 - 2)
number2 = (16 \setminus 3) \land 2 * 6 + 1
result = number1 - number2
```

- Q7. Write a Visual Basic code that reads the radius of a circle from a textbox, assume that the textbox is text1, & then calculate the area of the circle. The code should display the result of this operation to the user.
- **Q8.** Write a Visual Basic code that reads 3 numbers from TextBoxes, stores them in variables then calculates their avarage. The output should be diplayed in a Label.
- **Q9.** Create a simple a calculator application as shown in the following figure



The calculator allows a user to enter two numbers in the TextBoxes. There are four Buttons labeled +, -, / and \*. When the user clicks the Button labeled as addition, subtraction, multiplication or division, the application performs that operation on the numbers in the TextBoxes and displays the result. The calculator also should clear the calculation result when the user enters new input.