

University of Technology - Electromechanical Engineering Dept.

Final Exam Sample No(1) - 2013-2014

Class: 1st Year

Subject: Computer Science

Examiner: Lect .Abdul Kareem Kasim



Time: 3 hr

Date:

Note: Answer **Four** Questions

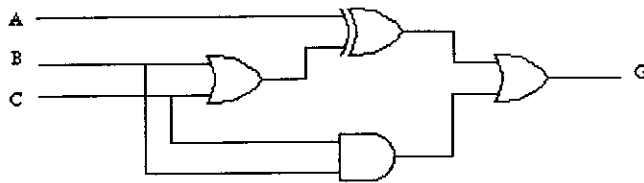
Name:

ID No.

Signature

Q1: (A) For the logical circuit shown below:

- 1- Draw the flow chart to perform the function (G) of the circuit
- 2- Write the outputs for all input probabilities.



(10) marks

(B) Design a Form with List Box, Text Box and three command buttons, write code for the following events:

- 1- Hello_command event to add Hello to List Box.
- 2- WellCome_command event to write WellCome in the Text Box.
- 3- Clear_command event to delete the statements from the List Box and Text Box.
- 4- Form_click event to terminate the program.

(5) marks

Q2(A): Draw a flow chart to find the value of S from the following equation:

$$S = \sum_{I=1}^N \sqrt{(A+B)^I}$$

(8)marks

(B): Explain the advantages and disadvantages of Assembly languages.

(4) marks

(C): Draw a Block diagram of computer system.

(3)marks

O3 (A): Write a program to enter the elements values of one dimensional array A(100) by using the Input Box, then find & display the largest value with red color on Text Box, and display it's location in the array with green color on another Text Box Command_Clear Event to clear all Text Boxes

(10)marks

(B): Define the meaning of :

Volatile Memory, Assembly Language , Multitasking , Booting , Operating System

(5)marks

Q4(A): Design a Form and write a program to perform the following:

- 1-Enter any number in the text box labeled " Enter no."
- 2-When the user click on the command button labeled "Square", display the square of the number entered in step(1) in another Text Box.
- 3-When the user click on the command button labeled "Cube", display the cube of the number entered in step(1) in another Text Box.
- 4-When the user click on the command button labeled "Sqr", display the square root of the number entered in step(1) in another Text Box.
- 5-The font color of all Text Boxes can be changed by two options(Red or Green)
- 6-Terminate the program by using "Cancel" command button

(10) marks

(B) Write a program to enter the elements values of the one dimensional array A(6) by using the InputBox, then display array B(6) which is the inverse of A(6)

(5) marks

Q5 (A): Draw a flow chart and write a program to find and print the students succeeding rate for (80) degrees in computer science by using the " Do UntilLoop" statement. Using the InputBox to enter the degrees.

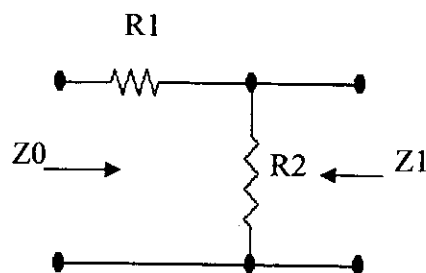
(10)marks

(B): Design a Form with two Text Boxes to enter the values of R1 and R2 for the circuit shown below, calculate (I) and print the result on the Message Box with Command Click_event. Using Form_Click_event to terminate the program

$$Z0 = R1 + R2$$

$$Z1 = R2$$

$$I = \frac{Z0 * Z1}{Z0 + Z1}$$



(5)marks

Handwritten signature and text in Urdu: "محمد امجد علی" (Muhammad Aamir Ali)