



## **UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF THE  
DIPLOMA IN INFORMATION TECHNOLOGY  
FIRST SEMESTER, 2023/2024  
(AUGUST-DECEMBER, 2023)**

**DIT 0200: VISUAL BASIC PROGRAMMING**

**STREAM: Y2 S1**

**TIME: 2 HOURS**

**DAY: WEDNESDAY, 12.00 -2:00 PM**

**DATE: 29/11/2023**

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### **INSTRUCTIONS**

- 1. Do not write anything on this question paper.**
- 2. Answer Question ONE [Compulsory] and any other TWO Questions.**

### **QUESTION ONE (30 Marks)**

- a) Explain the typical uses of the following control tools as used in visual basic (4 marks)
- i. Label
  - ii. Textbox
  - iii. Button
  - iv. Combo Box
  - v. List Box
- b) Write a visual basic that calculates the area of a triangle and displays the result to the console. [5 marks]
- c) Explain any visual basic IDE elements. [6 marks]

- d) State four data types used in event driven programming. [4 marks]
- e) Write a program in visual basic that display even numbers between 20 and 40 on a form. Use a do while statement. Attach code on a command button. [4 marks]
- f) Explain the different error-handling styles used in visual basic. [6 marks]

**QUESTION TWO (20 Marks)**

- a) Explain the basic steps in creating a visual basic project. [10 marks]
- b) List down standard controls found in visual basic toolbox. [10 marks]

**QUESTION THREE (20 Marks)**

- a) Explain five rules that should be observed in naming variables in visual basic. [6 marks]
- b) i. Explain two reasons for writing a comment in visual basic. [4 marks]
- ii. Explain briefly four access modifiers found in visual basic. [4 marks]

**QUESTION FOUR (20 Marks)**

- a) What is an array? Discuss different types of arrays. [8 marks]
- b) Define the following IDE components of a visual studio. [4 marks]
  - i) Form Designer
  - ii) Solution Explorer
  - iii) Properties Window
  - iv) Toolbox Window
- c) State three types of errors and give an example of each. [8 marks]

**QUESTION FIVE (20 Marks)**

- a) Write a program that will return the sum of all odd numbers between 1 and 100. [4 marks]
- b) Using any technique, outline steps that can be followed when connecting a project to a database. [10 marks]
- c) Explain three operators used in visual basic program. (6 marks)