

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS
ADMINISTRATION WITH IT
YEAR 2, SEMESTER 2
2024/2025 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: ITB 9202

COURSE TITLE: Object Oriented Programming in Java

VENUE:.....MAIN.....STREAM.....

DATE: EXAM SESSION: AUGUST-DECEMBER 2024

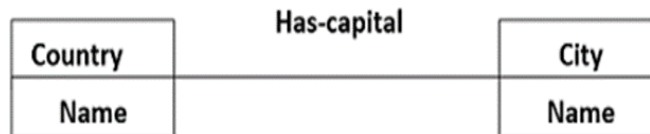
TIME: 2.00 HOURS

INSTRUCTIONS:

- 1) Answer QUESTION ONE (Compulsory) and ANY other TWO questions**
- 2) Candidates are advised not to write on the question paper**
- 3) Candidates MUST hand in their answer booklets to the invigilator while in the examination room**
- 4) Mobile phones are NOT allowed in the examination room.**

QUESTION ONE (30 MARKS)

- i. Discuss the fundamental features of object-oriented programming, giving examples (10 Marks)
- ii. Discuss the comparison of class and object (10 Marks)
- iii. See the following diagram and identify the type of association (2 Marks)



- a) One-to-One association
 - b) Many-to-Many association
 - c) Ternary association
 - d) One-to-Many association
- iv. A non-member function cannot access which data of the class? (2 Marks)
 - a) Private data
 - b) Public data
 - c) Protected data
 - d) All of the above
 - v. Which of the following objects is a container? (2 Marks)
 - a) MaskedTextBox
 - b) GroupBox
 - c) RadioButton
 - d) RichTextBox
 - vi. Which of the following is used to delete a directory in VB.Net? (2 Marks)
 - a) Directory.Delete()
 - b) Directory.Remove()
 - c) Directory.Erase()
 - d) None of the above
 - vii. Which of the following is the correct syntax to declare a variable in VB.Net? (2 Marks)
 - a) var x = 10
 - b) Dim x As Integer = 10
 - c) int x = 10
 - d) x := 10

QUESTION TWO (20 MARKS)

- a) State the difference between Vb and Vb.Net. (4 Marks)
- b) Explain the different types of assembly (4 Marks)
- c) What do you understand by the term Metadata (2 Marks)
- d) What is the purpose of testing a program with sample data? (1 Mark)
- i. To be sure that the user has input a valid number
 - ii. To check to see if the program will run
 - iii. To ensure that the program handles the calculations correctly
 - iv. To be sure that there are no syntax errors in the program
- e) For fundamental Object Types given below explain their uses (7 Marks)
- i. Label
 - ii. Textbox
 - iii. Button
 - iv. Checkbox
 - v. Radio button
 - vi. List box
 - vii. Combo box
- f) What will the following section of code do? (2 Marks)

```
Private Sub btnExit_Click(ByVal sender As System. Object,  
-ByVal e as System.EventArgs) Handles btnExit.Click  
Me.Close()
```

QUESTION THREE (20 MARKS)

- a) State the limitations of inheritance (4 Marks)
- b) What is the difference between a base class and a superclass (2 Marks)
- c) Discuss any five limitations of Object-Oriented programming. (10 Marks)
- d) State the main features of Object oriented programming (4 Marks)

QUESTION FOUR (20 MARKS)

- a) Describe three types of code stepping features used in visual basic programming language.
(9 Marks)
- b) Explain the comparison between Object-Oriented programming and Procedure-Oriented programming
(10 Marks)
- c) The_____ property of a label determines if the label can be seen by the user.
(1 Mark)
 - i. Visible
 - ii. Font
 - iii. Selected
 - iv. Size

QUESTION FIVE (20 MARKS)

- a) difference between sub procedure and event procedures as used in visual basic programming giving example for each.
(10 Marks)
- b) using a suitable syntax, illustrate how you would use else If in a situation where you have more than one condition to be executed at the same time, to write a program to award student grades where 75 and above is A to E
(10 Marks)