

**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 AND BSC ACTUARIAL SCIENCE WITH IT**  
**YEAR 2, SEMESTER 2**  
**2024/2025 ACADEMIC YEAR**  
**MAIN CAMPUS**

---

**COURSE CODE: ITB 9202**

**COURSE TITLE: PROGRAMMING IN VISUAL BASIC**

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

**DATE: ...17/4/2025.....EXAM SESSION: 11.00-1.00**

**TIME:2.00 HOURS      VENUE: LAB 13**

---

**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.

JOOUST OBSERVES ZERO TOLERANCE TO EXAM CHEATING

## QUESTION ONE (30 MARKS)

- i. Discuss any five limitations of Object-Oriented programming. (10 Marks)
- ii. Visual Basic provides a wide assortment of controls for gathering input, displaying information, selecting values, showing graphics, and more. Explain the use of each given control (10 Marks)
- a) CheckBox
  - b) ComboBox
  - c) Button
  - d) Form
  - e) GroupBox
  - f) HScrollBar
  - g) Label
  - h) ListBox
  - i) PictureBox
  - j) TextBox
- iii. Who developed Visual Basic? (1 Marks)
- a) Symantec
  - b) Ashton-Tate
  - c) Microsoft
  - d) Sybase
- iv. Which of the following statement is used to define a class in visual basic? (1 Marks)
- a) Event class statement
  - b) Class statement
  - c) Form class statement
  - d) Event statement
- v. Which of the following extension is used to represent the project file in Visual Basic? (1 Marks)
- a) .vbp
  - b) .vb
  - c) .cls
  - d) .vwb
- vi. If you keep a variable undeclared, it is automatically taken as to which of the following data type in Visual Basic? (1 Marks)
- a) Char
  - b) Int
  - c) Object
  - d) String
- vii. Which of the following applications can be developed using Visual Basic tool? (1 Marks)
- a) Graphical User Interface

- b) Real-time
- c) Character User Interface
- d) All of the mentioned

viii. In Visual Basic, which of the following is used for coding single-alternative and dual-alternative selection structures? (1 Marks)

- a) Switch-Case block
- b) If...Then...Else statement
- c) function overloading
- d) Recursion

ix. What will be the output of the following Visual Basic code, If the intnumber variable is 110? (1 Marks)

```
if intnumber<=100 then
```

```
    Intnumber=intnumber*2;
```

```
else
```

```
    Intnumber=intnumber*3;
```

```
EndIf
```

- a) 180
- b) 330
- c) 156
- d) 270

x. In the Visual Basic application, which of the following are listed in a properties window? (1 Marks)

- a) Items
- b) Values
- c) Attributes
- d) Objects

xi. What will be the output of the following Visual Basic expression? (1 Marks)

```
Financial.Pmt (0.05,3,9000)
```

- a) -3043.88
- b) -3034.88
- c) -3408.48
- d) -3304.88

xii. Which of the following is commonly used to perform an immediate action when clicked in

Visual Studio?

(1 Marks)

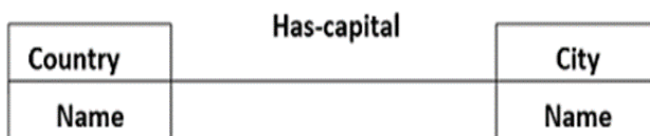
- a) Button control
- b) Close
- c) End
- d) Exit

## QUESTION TWO (20 MARKS)

- i. 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
- ii. State and explain the main features of Object oriented programming (12 Marks)
- iii. Differentiate between Integer and Double data types as used in visual Basic (2 Marks)
- iv. Explain four data types found in visual basic programming (4 Marks)

## QUESTION THREE (20 MARKS)

- i. Discuss three types of code stepping features used in visual basic programming language. (6 Marks)
- ii. 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
- iii. State visual basic rules for naming variables. (3 Marks)
  - iv. Identify any THREE controls in visual basic. (3 Marks)
  - v. Explain the following concepts as applied to Visual Basic (6 Marks)
    - a) Event
    - b) Properties

c) Method

**QUESTION FOUR (20 MARKS)**

- i. What is Visual Basic? (1 Marks)
- ii. Who is the father of Visual Basic? (2 Marks)
- iii. Discuss the difference between data encapsulation and data abstraction. (8 Marks)
- iv. State storage allocation for each given data type. (5 Marks)

- a) Byte
- b) Char
- c) Date
- d) Decimal
- e) Double

v. Define the following terms as used in Visual Basic.NET: (4 Marks)

- a) Project.
- b) Graphical User Interface

**QUESTION FIVE (20 MARKS)**

- i. Explain the three VB programming modes (6 Marks)
- ii. There are different types of loop in programming. Name them and explain the purpose of them (3 Marks)
- iii. Visual basic responds to events using which of the following ( 1 Marks)
  - a) a code procedure
  - b) an event procedure
  - c) a form procedure
  - d) a property
- iv. explain steps to make VB program in Visual Basic (7 Marks)
- v. discuss what you understand by the word object in VB stating what it consists ( 3 Marks)

