



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
INNOVATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL DIPLOMA

IN

INFORMATION TECHNOLOGY

**SUBJECT: Programming in Visual Basic
NET (Theory)**

PAPER NO: 553/18/S04A

DURATION: 3 Hours

NOVEMBER/DECEMBER 2023 EXAMINATION

REQUIREMENTS

Answer booklet

INSTRUCTIONS TO CANDIDATE

Answer all questions

PAPER NO: 553/18/S04A -PROGRAMMING IN VISUAL BASIC NET (THEORY)

QUESTION 1

- a) With the aid of code snippets describe three (3) keyboard events used in VB.NET. (9 marks)
- b) Outline the contents of the following sections of the VB.NET IDE menu
 - i) The IDE menu (2 marks)
 - ii) Edit>intellisense submenu (2 marks)
 - iii) Edit>outlining submenu (2 marks)

QUESTION 2

Using diagrams explain the following types of inheritance as used in VB.NET:

- a) Single (3 marks)
- b) Multiple (3 marks)
- c) Multi-level (4 marks)

QUESTION 3

- a) Declare a structure called "student" with the following members: student name, studentId, studentRegNo, exam mark, and courseCode. (5 marks)
- b) Outline the following elements of .NET framework:
 - i) Common Language Runtime. (4 marks)
 - ii) Framework class library (4 marks)
 - iii) Common type system (4 marks)
- c) Briefly explain the following keywords as they are used in VB.NET
 - i) Try (2 marks)
 - ii) Catch (2 marks)
 - iii) Finally (3 marks)
 - iv) Throw (3 marks)

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QUESTION 4

- a) Describe the following controls as they are used in VB.NET:
- i) ScrollBar (3 marks)
 - ii) progressBar (3 marks)
 - iii) Listview (3 marks)
 - iv) Treeview (3 marks)
- b) Distinguish between MDI and SDI in VB.NET. (8 marks)

QUESTION 5

- a) Explain three (3) classes that are included in a complete .NET data provider. (9 marks)
- b) Outline any three (3) members of the FileMode enumerator. (6 marks)

QUESTION 6

Menus are a common way of availing options to an application user.

- a) Describe the VB.Net control that is used to create a menu on windows forms. (3 marks)
- b) Explain any two (2) properties of the control discussed in (i) (6 marks)
- c) Outline the stages that you would take to add the control onto your windows application. (4 marks)

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