

**MASTER OF COMPUTER APPLICATION
FOURTH SEMESTER
PROGRAMMING WITH VB.NET
MCA-403**

(Use separate answer scripts for Objective & Descriptive)

Duration : 3 hrs.

Full Marks : 70

Time : 20 min.

(PART-A : Objective)

Marks : 20

Choose the correct answer from the following:

1×20=20

- The size of an array can be changed at the program execution time is known as _____ array.
 - Fixed size
 - Dynamic
 - Static
 - Multi dimensional
- "A variable can be declared without specifying its type"-this property will satisfy the condition of-
 - Option Strict On
 - Option Strict Off
 - Option Explicit On
 - Option Explicit Off
- To determine whether a _____ is checked or not, the 'checked' property is tested.
 - Group Box
 - Combo Box
 - Radio Button
 - Text Box
- A _____ is a logical collection of related classes in VB.NET.
 - Project
 - Class
 - Form
 - Namespace
- The _____ statement terminates the loop & transfers the execution point outside the 'for loop'.
 - Exit
 - Break
 - Exit for
 - Continue
- The _____ will hold a copy of the information from the database.
 - Connection
 - Command
 - DataSet
 - DataAdapter
- In _____ access modifier only objects of the parent type have access to its members.
 - Friend
 - Private
 - Protected
 - Public
- The _____ consists of segments of pre-written code called classes that provide many of the functions that are needed for developing .NET applications.
 - Visual studio.NET
 - .NET framework class library
 - Integrated development environment
 - All of the above
- The _____ includes a Text property that contains the caption of the control, but _____ control doesn't contain any text property.
 - Combo Box, List Box
 - Text Box, Rich Text Box
 - Radio Button, Check Box
 - Group Box, Panel

10. To develop a Visual Basic.NET application, a product called _____ is used.
- CLR
 - Visual Studio.NET
 - .NET Framework
 - All of the above

11. Fields, properties, methods and events are called _____ of a class.
- Constructor
 - Objects
 - Members
 - Overloading

12. The _____ is used to create & edit code that the application requires.
- Solution explorer
 - Toolbox
 - Code window
 - All of the above

13. Designing a _____ is the basis of any GUI based application.
- Window
 - Solution
 - Project
 - Form

14. One property that applies only to a combo box is the _____ property.
- DropDownStyle
 - DropDownList
 - Checked
 - SelectedIndexChanged

15. In Vb.net, data is handled through _____ which facilitates development of web applications.
- DAO
 - RDO
 - ADO
 - ADO.NET

16. The statement under _____ will run continuously as long as the Boolean expression evaluates to false.
- Do...loop until
 - Do while...loop
 - For...next
 - Select...case

17. "Members are used to create a local version of a member that has broader scope."-this technique is called _____.
- Overloading
 - Overriding
 - Shadowing
 - All of the above

18. Choose true/false statements regarding select case-
- Any implicit data type can be used in a select statement.
 - Multiple statements under a single case statement cannot be used.
- i. True, ii. False
 - i. False, ii. False
 - i. True, ii. True
 - i. False, ii. True

19. To use an access key, _____ symbol is used.
- \$
 - ;
 - :
 - &

20. A _____ application runs on the Windows Desktop and can consist of one or more Windows Forms.
- Windows Forms
 - Properties
 - Project
 - None of the above

(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

- What is a Dynamic array? How it differs from a fixed size array and a control array? Write a program to show the proper use of a dynamic array. 10
- What is the importance of using inheritance in a class? What are the necessary terms used in a program during inheritance? 5+5=10
 - Write a suitable program to explain all these terms using class.
- What is the difference between a function and a sub procedure? 4+6=10
 - Write a program to calculate the area of a triangle using a sub procedure and swap the values of 2 numbers using a function.
- What is a class? Define the features Encapsulation, Abstraction & Polymorphism. 5+5=10
 - Explain the different Access Specifiers used in VB.NET.
- What is Option Explicit & Option Strict in VB.NET? 5+5=10
 - Explain with the help of examples for each of them.
- Why Radio Button & Check Box controls are used? What is the difference between them? 4+6=10
 - Write a program to enter the name, course and gender of a student where course is a Check Box and gender is a Radio Button and display all the inserted or selected values in a textbox with proper format.
- Explain different types of looping statements in VB.NET. 5+5=10
 - Write a program to display all the Armstrong Numbers within a range given by the user.
- Why ADO.NET is used in VB.Net? 3+3+4=10
 - What are the objects of ADO.NET?
 - Write a sub procedure to display the contents of the database in a data grid view.

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