NAME:

Multiple Choice (2 each):

1. What are the two primary programming methodologies used today?
   a. Basic and procedural
   b. Object-oriented and Basic
   c. Procedural and Object-oriented
   d. Cobol and Pascal

2. Attributes in Visual Basic are referred to as
   a. GUIs
   b. Code
   c. Events
   d. Properties

3. The CPU only processes instructions written in:
   a. Machine language
   b. Notepad
   c. Microsoft Word
   d. C++

4. What are some GUI elements?
   a. Objects, actions, code, and performance
   b. Windows, actions, menus, and hardware
   c. Windows, dialog boxes, buttons, and menus
   d. Mice, cables, keyboards, and disks.

5. How do you add a control onto a form?
   a. Drag the control from the toolbox into the form window.
   b. Place your mouse in the form and type the control name.
   c. Double click the text property in the Properties Window.
   d. Click the Common Controls tab in the toolbox window, and then double click on the control icon.
6. What object is used to identify the current form?
   a. Name
   b. Display
   c. Me
   d. Sub

7. You are writing a program to compute carpet size. Instead of multiplying the length by the width, you add the two numbers instead. This is an example of:
   a. A syntax error
   b. A run-time error
   c. A logical error
   d. All of the above

8. What is NOT a definition for a keyword?
   a. A word that is reserved for a specific task or command.
   b. A word that is predefined for a specific purpose.
   c. A user-defined word that identifies a variable.
   d. A word that has special meaning in a programming language.

9. Which of the following is an appropriate control to display a picture?
   a. TextBox
   b. Label
   c. PictureBox
   d. Form

10. Which of the following is an appropriate control for a user to enter his or her name?
    a. TextBox
    b. Label
    c. PictureBox
    d. Form

11. The condition in the following (incomplete) statement: If (condition 1 And condition 2) Then is only true:
    a. if Condition 1 is True and Condition 2 is False
    b. if Condition 1 is False and Condition 2 is False
    c. if Condition 1 is True and Condition 2 is True
    d. if Condition 1 is False and Condition 2 is True

12. An If statement must
    a. have an Else clause
    b. have a Then clause
    c. have an ElseIf clause
    d. have a logical (Boolean) operator in its condition
13. Relational operators allow you to:
   a. add numbers
   b. compare numbers
   c. concatenate strings
   d. average numbers

14. This operator reverses the logical value of an expression. It makes a true expression false and a false expression true.
   a. And
   b. Or
   c. Xor
   d. Not

15. Which of the following describes the part of a program in which a variable may be used:
   a. Segment
   b. Lifetime
   c. Scope
   d. Module

16. Visual Basic automatically adds this to a list box when it contains more items than can be displayed:
   a. Larger list box
   b. Scroll bar
   c. Second box
   d. Message box

17. You do this to get the total number of iterations of a nested loop:
   a. Add the number of iterations of all the loops
   b. Multiply the number of iterations of all the loops
   c. Average the number of iterations of all the loops
   d. Get the number of iterations of the outermost loop

18. What is the process of making user input is valid?
   a. Syntax validation
   b. User validation
   c. Input validation
   d. Inspection validation

19. What returns a value to the part of the program that called it?
   a. Call
   b. Procedure
   c. Function
   d. Declaration
20. A Try … Catch statement is useful for handling:
   a. Syntax errors
   b. Logical errors
   c. Runtime errors
   d. Hardware errors

21. Which of the following describes the part of a program in which a variable may be used:
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   b. Lifetime
   c. Scope
   d. Module

22. What type of statement causes a procedure to execute?
   a. Procedure declaration
   b. Access specifier
   c. Procedure call
   d. Step into

23. A Windows application’s default start up object is:
   a. The first form created
   b. A procedure named Main
   c. The last form created
   d. A procedure named StartUp

24. Procedures and variable declarations used in more than one file should be stored in a:
   a. Public Module
   b. Private Module
   c. Standard Module
   d. Form Module

25. A program structure that describes an object’s properties and methods is a:
   a. Class
   b. Code
   c. Variable
   d. Form
True/False (2 each):

1. You should be very cautious about, and even avoid, placing comments in your code. **True**  **False**

2. You can run an application in the Visual Studio environment by pressing the **F5** key. **True**  **False**

3. You cannot modify a control’s Text property with code. **True**  **False**

4. A variable is a name that represents a storage location in the computer’s memory. **True**  **False**

5. The tab order is permanent and can not be changed. **True**  **False**

6. What is the value of the following relational expression “cat” < “dog”.  **True**  **False**

7. An If statement is an example of a conditional statement. **True**  **False**

8. It is possible to write an expression that contains more than one logical (Boolean) operator. **True**  **False**

9. You can assign a constant a new value with an assignment statement. **True**  **False**

10. If the CInt function can not convert its argument, it causes a runtime error. **True**  **False**

11. Infinite loops keep executing until the program is interrupted. **True**  **False**

12. A pretest loop always performs at least one iteration, even if the test expression is false at the start. **True**  **False**

13. You can assign a constant a new value with an assignment statement. **True**  **False**

14. You can pass more than one argument to a procedure or function. **True**  **False**

15. When a modal form is displayed, no other statements in the procedure will execute until the form is closed or hidden. **True**  **False**
Short Answer (2 for each question or part of a multipart question):

1. For each of the following controls, make up an appropriate legal name that conforms to the standard control name conventions described in the text.
   
   a. A TextBox control in which the user enters his or her last name.

   b. A Label control used to display the total of an order.

   c. A Button control that clears all the input fields on a Form.

2. Declare a variable appropriate for holding the number of backpacks sold this week by an outdoors store.

3. Calculate the total number of party members (intPartySize) by adding the number of adults (intNumAdults) and the number of children (intNumChildren).

4. Write an If statement that multiplies decPayRate by 1.5 when decHours is greater than 40.
5. Give the value of `dblNumber` after execution of each of the following (independent) assignment statements:

   a. `dblNumber = 2 + 4 * (3 + 2)`

   b. `dblNumber = (2 + 4) * 3 + 2`

6. Explain the difference between an object’s Text and its Name.

7. An application contains the function `Square` (given below). Write a statement that passes value 4 to this function and assigns its return value to a variable called `intResult`. Assume `intResult` is already declared.

   ```vbnet
   Function Square (ByVal intValue As Integer) As Integer
       Return intValue ^ 2
   End Function
   ```