**Wilbur Wright College**

**CIS 142 C# Programming - Part I**

*Midterm Questions Bank*

1. The purpose of the Visual Studio 2008 IDE is to

a) create a program.

b) run a program.

c) debug a program.

d) All of the above.

Answer: d

2. By default, the Visual Studio 2008 IDE assigns this name to a new Windows Forms

project:

a) NewProject1

b) WindowsFormsApplication1

c) NewProject

d) MyProject

Answer: b

3. If the Solution Explorer is not shown, select \_\_\_\_\_\_\_\_\_\_.

a) View > Solution Explorer  
b) File > Solution Explorer  
c) Edit > Solution Explorer  
d) Tools > Solution Explorer

Answer: a

4. The Properties window  
a) allows you to modify control’s properties without writing any code.  
b) displays a control’s information.  
c) has the same set of options for every control.  
d)a and b   
e)a and c

Answer: d

5. Applications that contain only text output are referred to as .

a) text applications

b) console applications

c) simple applications

d) None of the above.

Answer: b

6. A single line comment in C# begins with:

a) \*/

b) #

c) //

d) \\

Answer: c

7. The starting point of a C# program is the           method.

a) Main

b) Start

c) Open

d) None of the above.

Answer: a

8. All statements in C# must end with:

a) :

b) ;

c) #

d) .

Answer: b

9. What does IntelliSense help you do?  
a) Detect errors  
b) Simplify writing code

c) Compile your code  
d) a and c

Answer: b

10. Where can’t you see errors?  
a) The line where the error occurred  
b) The Error List window  
c) The Solution window

d) The Command Prompt window

Answer: c

11. What do the following lines print?

Console.Write( “Welcome to ” );

Console.WriteLine( “C# Programming!” );

a) Welcome to

C# Programming!  
b) Welcome to C# Programming!

c) Welcome to  
 C#  
 Programming!  
d) Welcome  
 to  
 C#  
 Programming!

Answer: b

12. How can you produce the following results in one line of code?

Welcome

to

C#

Programming!

a) Console.Write( “Welcome \n to \n C# \n Programming!\n” );

b) Console.WriteLine( “Welcome \n to \n C# \n Programming!” );  
c) Console.Write( “Welcome \n to \n C# Programming!” );  
d) a and b

Answer: d

13. Which of the following have the capacity to display formatted data?  
a) Console.Write  
b) Console.WriteLine  
c) Console.WriteFormat  
d) a and b

Answer: d

14. Every variable has a  .

a) type

b) size

c) value

d) All of the above.

Answer: d

15. Which of the following is in the correct order of operator precedence?

a) multiplication, division, parenthesis

b) addition, subtraction, division

c) parenthesis, multiplication, addition

d) None of the above.

Answer: c

16. Which of the following represents "is equal to?"

a) =

b) !=

c) =!

d) ==

Answer: d

17. How many classes are there in a program/application?

a) 1

b) 3+

c) 11+

d) The number of classes may vary; however, in most cases, there is more than one.

Answer: d

18. Which of the following simple type should be used for monetary values?

a) double

b) float

c) int

d) decimal

Answer: b

19. An object’s property can have which of the following accessors?

a) get

b) set

c) a and b

d) None

e) All of the above

Answer: e

20. Which of the following terms refers to the data represented by an object’s instance variables?

a) Properties

b) Attributes

c) Methods

d) Information

Answer: b

21. \_\_\_\_\_\_\_ headers can include void, which specifies that it does not return anything.

a) Method

b) Class

c) Variable

d) a and b

Answer: a

22. In UML class diagrams, the + sign

a) signifies that the section can be expanded.  
b) is the public visibility symbol.  
c) stands for addition.

d) None of the above

Answer: b

23. Every C# application is composed of at least one:

a) public method

b) data member

c) public class declaration

d) imported class

Answer: c

24. Which of the following method headers does the following statement match?  
 Action( “This is an example”, 15, 25.5)  
a) Action()  
b) Action(int x, double y, string z)

c) Action(string x , double y, int z)

d) Action(string x, int y, double z)

Answer: d

25. Why would the access modifier private be used instead of public?  
a) To make it more complicated for accessing methods and variables

b) To hide sensitive information  
c) To help insure encapsulation  
d) b and c

Answer: d

26. How can a private variable be accessed?  
a) If the private variable is inside the same class as the currently executing code, then you can access it normally using the variable’s name.  
b) Use the property for that variable.

c) Use a method that is in the same class as the private variable, which can access the variable.

d) All of the above

Answer: d

27. Attributes of a class are also known as:

a) constructors

b) local variables

c) fields

d) classes

Answer: c

28. Which of the following is a reason for using the get and set accessors?  
a) To follow a universal standard.   
b) To allow the class to control the manner in which the data is set or returned.

c) To make a program more robust.  
d) b and c  
e) All of the above

Answer: d

29. Which method converts a string into an int?  
a) string\_variable.ConvertToInt  
b) Convert.ToInt32  
c) Type.ConvertToInt  
d) All of the above

Answer: b

30. A variable of a reference type contains:

a) information about the type and its data

b) data of that type

c) the address of the location in memory where data is stored

d) None of the above.

Answer: c

31. Which of the following is a C# built-in reference type?

a) int

b) string

c) bool

d) char

Answer: b

32. What is the default value of a reference?

a) 0

b) “”

c) null

d) default

Answer: c

33. A \_\_\_\_\_\_\_\_ is called to create a new instance of a class.

a) constructor  
b) destructor  
c) creator

d) new

Answer: a

34. A default constructor has how many parameters?

a) 0

b) 1

c) 2

d) Variable

Answer: a

35. Which of the following are examples of control statements?  
a) if  
b) if...else  
c) while

d) b and c  
e) a, b and c

Answer: e

36. What is an algorithm?

a) a series of actions that solve a particular problem

b) an English description of a problem to be solved

c) the process of converting between data types

d) None of the above.

Answer: a

37. Which of the following is a type of control structure?

a) declaration structure

b) repetition structure

c) flow structure

d) All of the above.

Answer: b

38. The three types of selection structures are:

a) foreach, for and switch

b) if, for and switch

c) if, if/else and while

d) if, if/else and switch

Answer: d

39. Which of the following is a double-selection control statement?

a) do…while

b) for

c) if…else

d) if

Answer: c

40. if is a \_\_\_\_\_\_\_\_\_ statement.

a) restricted

b) conditional

c) repetitional

d) unrestricted

Answer: b

41. What is output by the following C# code segment?

int temp;

temp = 200;

if ( temp > 90 )

Console.WriteLine( "This porridge is too hot." );

if ( temp < 70 )

Console.WriteLine( "This porridge is too cold." );

if ( temp == 80 )

Console.WriteLine( "This porridge is just right!");

a) This porridge is too hot.

b) This porridge is too cold.

c) This porridge is just right!

d) None of the above.

Answer: a

42. Which of the following statements would cause a while statement to stop executing?

a) 3 <= 11

b) !(7 != 14)

c) 6 != 9

d) All of the above.

Answer: b

43. Which statement is false?

1. To ensure that the operands are of the same type, C# performs implicit conversion on selected operands.
2. Cast operators are unary operators.
3. Cast operators associate from right to left and are one level lower than the multiplicative operators.
4. Cast operators are formed by placing parentheses around the name of a type.

Answer: c

44. When the programmer knows how many times a loop will execute in advance, a          loop should be used.

a) sentinel

b) infinite

c) counter-controlled

d) None of the above.

Answer: c

45. What is the result value of c at the end of the following code segment?

int c = 8;

c++;

++c;

c %= 5;

a) 0

b) 1

c) 3

d) None of the above

Answer: a

46. C, C++, C# are \_\_\_\_\_\_\_ typed languages.  
a) strongly  
b) moderately   
c) weakly  
d) the languages vary

Answer: a  
  
47. Which of the following is not a simple type in C#?  
a) byte  
b) int  
c) bool  
d) bit

Answer: d

47. Which primitive type can hold the largest value?

1. int
2. long
3. float
4. Double

Answer: d

48. What is the size in bits of an int?

1. 8
2. 16
3. 32
4. 64

Answer: c

49. Which of the following is required for counter-controlled repetition?

a) a boolean

b) a method

c) a condition

d) All of the above.

Answer: c

50. Which of the following is syntactically incorrect?

a) for (int i = 1; i < 10; )

b) for ( ; i == 3; )

c) for (i == 3)

d) None of the above.

Answer: b

51. A case can be labeled as to execute in the event that none of the pro­vided cases are equivalent to the controlling expression.

a) general

b) default

c) case \*

d) None of the above.

Answer: b

52. For the code segment below,

1. switch( q )

2. {

3. case 1:

4.

5. case 2:

6. Console.WriteLine( "orange" );

7. break;

8. case 3:

9. Console.WriteLine( "banana" );

10. break;

11. case 4:

12. Console.WriteLine( "pear" );

13. case 5:

14. Console.WriteLine( "grapes" );

15 break;

16. default:

17. Console.WriteLine( "kiwi" );

18. } // end switch

between which two lines does an error occur?

1. 3-4
2. 12-13
3. 15-16
4. 16-17

ANSWER: b

53. What is the Windows key sequence for typing the end-of-file indicator in Command Prompt window?

a) <Alt> z

b) <Ctrl> z

c) <Windows>z

d) <Shift>z

Answer: b

54. The statement, when executed in a while loop, skips the remaining statements in the body of the structure and begins the next iteration of the loop.

a) continue

b) break

c) next

d) None of the above.

Answer: a

55. The statement, when executed in a for loop, will terminate the loop.

a) continue

b) break

c) next

d) None of the above.

Answer: b

56. Which of the following operators can be used to ensure at least one out of multiple conditions is true?

a) ||

b) &&

c) ==

d) ^

Answer: a

57. Suppose variable gender is MALE and age equals 60, how is the expression

( gender == FEMALE ) && ( age >= 65 ) evaluated?

1. The condition ( gender == FEMALE ) is evaluated first and the evaluation stops immediately.
2. The condition ( age >= 65 ) is evaluated first and the evaluation stops immediately.
3. Both conditions are evaluated, from left to right.
4. Both conditions are evaluated, from right to left.

Answer: a

58. \_\_\_\_\_\_\_\_\_ methods can be called without the need for an object of the class to exist.  
a) special  
b) independent  
c) static  
d) dependent

Answer: c

59. Methods are called by writing the name of the method followed by      enclosed in parentheses.

a) a condition

b) arguments

c) a counter

d) None of the above.

Answer: b

60. Many prepackaged classes and methods are provided in the .NET FCL, an acronym for the          .

a) Framework Class Library

b) Framework Class Listing

c) Form Class Library

d) None of the above.

Answer: a

61. Which of the following correctly calls the Math class method Sqrt with a value of 36?

a) Sqrt(36);

b) Math.Sqrt(36);

c) Math.Sqrt = 36;

d) None of the above.

Answer: b

62. Which of the following describes a static variable?

a) a variable with one copy shared by all class objects

b) a variable whose value may not be changed

c) all of the above

d) None of the above.

Answer: a

63. How are various parameters separated in the method header?  
a) brackets  
b) braces  
c) commas  
d) periods

Answer: c

64. To call a static method, use the \_\_\_\_\_\_\_\_\_ name followed by a period, and the method with its arguments.

a) class’s  
b) instance variable’s  
c) namespace’s

d) All of the above

Answer: a

65. Which keyword can programmers use to break out of a void method?

a) continue

b) break

c) return

d) next

Answer: c

66. A static method can \_\_\_\_\_\_\_\_.

a) call only other static methods of the same class directly

b) manipulate only static fields in the same class directly

c) be called using the class name and a dot (.)

d) All of the above

Answer: d

67. Stacks are \_\_\_\_\_\_\_\_\_\_\_\_\_ data structures.

a) FIFO

b) Random

c) LIFO

d) None of the above.

Answer: c

68. What does the Framework Class Library hold?  
a) namespaces

b) classes  
c) methods  
d) All of the above.

Answer: d

69. Which directive allows programmers to use the Framework Class Library?  
a) import  
b) using  
c) load

d) namespace

Answer: b

70. Identifiers declared within a class have .

a) block scope

b) class scope

c) local scope

d) None of the above.

Answer: b

71. Which of the following will violate the rules of overloading methods?  
a) Methods with the same signatures but different return types.  
b) Methods with different signatures but the same return type.  
c) Methods with different number of arguments.  
d) Method with different types of arguments.

Answer: a

72. Overloaded methods always have the same \_\_\_\_\_\_\_\_\_.

1. method name
2. return type
3. number of the parameters
4. order of the parameter

Answer: a

73. An overloaded method is one that

1. has a different name as another method, but the same parameters.
2. has the same name as another method, but different parameters.
3. has the same name and parameters as a method defined in another class.
4. has the same name and parameters, but a different return type as another method.

Answer: b

74. Which of the following methods are overloaded?

1. public int max ( int a, int b ) { … }
2. public double max ( double a, double b ) { … }
3. public int max ( int a, int b, int c ) { … }
4. public double max ( double a, double b, double c ) {…}
5. A and B are overloaded; C and D are overloaded
6. A and C are overloaded; B and D are overloaded
7. A, B and C are overloaded
8. All these four methods are overloaded

Answer: d

75. Suppose method1 is declared as

void method1 ( int a, float b )

Which of the following methods overloads method1?

1. void method2 ( int a, float b )
2. void method2 ( float a, int b )
3. void method1 ( float a, int b )
4. void method1 ( int b, float a )

Answer: c

76. A recursive method is a method that:

a) calls another method

b) calls itself

c) has no return type

d) None of the above

Answer: b

77. Passing an argument to a method by-value provides the method with:

a) the address of the value in memory

b) a separate copy of the value

c) the type of the value

d) None of the above.

Answer: b

78. The keyword is used to pass value-type variables to methods by-refer­ence.

a) ref

b) reference

c) RefPass

d) None of the above.

Answer: a

79. Arrays may have dimensions.

a) one

b) two

c) more than two

d) All of the above.

Answer: d

80. Arrays are data structures.

a) constant

b) dynamic

c) static

d) None of the above.

Answer: c

81. The number positioned in square brackets after an array name is the           of an item.

a) value

b) position

c) size

d) None of the above.

Answer: b

82. Which of the following correctly accesses the 13th element of array Book?

a) Book[0] + 13

b) Book[13]

c) Book[12]

d) None of the above.

Answer: c

83. Consider the array:

s[ 0 ] = 7  
s[ 1 ] = 0  
s[ 2 ] = -12  
s[ 3 ] = 9  
s[ 4 ] = 10  
s[ 5 ] = 3  
s[ 6 ] = 6

The value of s[ s[ 6 ] - s[ 5 ] ] is:

a) 0

b) 3

c) 9

d) 0

Answer: c

84. Arrays are allocated with the keyword .

a) new

b) array

c) mem

d) None of the above.

Answer: a

85. Which of the following correctly declares and allocates an array of double values?

a) double A[15];

b) double() A = new double[15];

c) double[] A = new double[25];

d) All of the above.

Answer: c

86. An array can be supplied values upon declaration by providing an .

a) initializer list

b) index

c) array allocation

d) None of the above.

Answer: a

87. Constants are declared using keyword .

a) static

b) const

c) dynamic

d) None of the above.

Answer: b

88. Attempting to access an array element out of the bounds of an array, a(n)          occurs.

a. ArrayOutOfBoundsException.

b. ArrayElementOutOfBoundsException.

c. IndexOutOfRangeException.

d. ArrayException.

Answer: c.