

Questions to .NET and Programming in C#

Ver 1.0

1.	.NET is said to accelerate the next generation of the Internet		[0.5]
	a) True	b) False	
2.	The unique feature of .NET is the _____ support that it provides		[0.5]
	a) Multi-platform	b) Multi-language	
3.	.NET is a whole new platform centered around the Intranet		[0.5]
	a) True	b) False	
4.	A program in .NET is first compiled by the language specific compiler into _____		[1.0]
	a) Common Language	c) Intermediate Language	
	b) Runtime Language	d) Visual Basic	
5.	What is the role of the CLR (Select all that apply)		[2.0]
	a) Manages memory	c) Compiles program into machine code	
	b) Compiles program to a .exe file	d) Compile once and run on any CPU & OS that supports the runtime.	
6.	Microsoft .NET is primarily made up of the following three components.		[2.0]
	a) Visual Studio .NET	c) 3rd party .NET services	
	b) Microsoft .NET products and services	d) .NET platform itself	
7.	Select the two core technologies on which the .NET platform is based.		[2.5]
	a) XML	c) Internet Protocols	
	b) WML	d) Internet computing	
8.	Microsoft .NET allows developers to develop applications using different languages, which run on the Unix platform		[0.5]
	a) True	b) False	
9.	The .NET platform is built on Internet Protocols such as _____ and _____		[1.0]
	a) TCP /IP	c) SOAP	
	b) IP	d) HTTP	
10.	The .NET platform is built on the following features of the Windows 2000 server family.(Select all that apply)		[1.5]
	a) Reliability	c) Scalability	
	b) Security	d) Manageability	
11.	Select the core .NET Enterprise Servers		[2.5]
	a) Commerce Server 2000	c) Apple Server	
	b) Exchange 2000 Server	d) Visual .Net Server	
12.	Core Microsoft .NET building block services		[2.0]
	a) Calendar	c) Dynamic delivery	
	b) Dynamic Service	d) Notification	
13.	_____ service allows users to handle their own rules for handling		[1.5]

	messages and notifications.	
	a) Notification	b) Personalization
14.	Select the service, which allows users to maintain their schedules thus facilitating timely and manageable interactions with other users.	[1.5]
	a) Dynamic Service	c) Notification
	b) Personalization	d) Calendar
15.	_____ allows developers and business analysts work together to define and modify business processes shared between applications.	[1.0]
	a) Orchestration	c) Common Language Runtime
	b) Web Service	d) .Net Framework
16.	Microsoft .Net was formerly known as _____	[0.5]
	a) NGUS	c) NGWS (Next Generation Windows Services)
	b) MGWS	d) NWGS
17.	C# allows _____ use of native pointers.	[0.5]
	a) Private	c) Public
	b) Complete	d) Restricted
18.	What is the correct syntax for comment entries in C#	[1.0]
	a) // ... //	c) /** ... **/
	b) /*... */	d) / ... /
19.	The public keyword can be ignored for the Main function in C#.	[1.0]
	a) True	b) False
20.	A C# program can have only one using directive	[0.5]
	a) True	b) False
21.	The WriteLine method is a part of the _____ class	[1.0]
	a) System	c) Console
	b) System.Output	d) Console.System
22.	C# is considered as a modern replacement for the language/s like (Choose all that apply)	[0.5]
	a) Java	c) C++
	b) C	d) VB
23.	C# is a _____ language.	[0.5]
	a) purely Procedure-Oriented	c) Procedure-Oriented and Object-Oriented
	b) partially Procedure-Oriented	d) purely Object-Oriented
24.	Manual memory management needs to be done in C#	[0.5]
	a) True	b) False
25.	Access Modifiers for variables in C# can be the following (Select all that apply)	[1.0]
	a) public	c) private
	b) protected	d) public protected
26.	In C#, an underscore is allowed as an initial character of a variable.	[0.5]
	a) True	b) False
27.	The prefix _____ enables the use of keywords as identifiers, which is useful when interfacing with other programming languages.	[0.5]

	a) #	c) \$	
	b) &	d) @	
28.	In C# array elements are automatically assigned default values		[0.5]
	a) True	b) False	
29.	What statement is used to completely abort the execution of a loop?		[0.5]
	a) continue	d) break	
	b) goto	e) exit	
30.	Console.ReadLine() returns the input as a _____		[1.0]
	a) String	c) Stream of Characters	
	b) Character	d) Integer	
31.	In C# datatypes are divided into two fundamental categories		[1.0]
	a) Value types and reference types	c) Pointers and values	
32.	_____ in simple terms is nothing but conversion of a value type into a reference type.		[1.0]
	a) Casting	c) Unboxing	
	b) Boxing	d) Overriding	
33.	_____ is all about converting a reference type into a value type.		[1.0]
	a) Overloading	c) Unboxing	
	b) Boxing	d) Casting	
34.	Unboxing requires an _____ cast.		[0.5]
	a) implicit	c) implicit or explicit	
	b) explicit	d) None of the above.	
35.	The _____ class is the ultimate base class for all data types.		[0.5]
	a) Object	c) Type	
	b) System	d) Console	
36.	System namespace is used in the C# programs to:		[1.0]
	a) interact with the system environment	c) interact with other classes in the namespace	
	b) Capture program outputs.	d) interact with the operating system	
37.	Which of the following is a correct statement to declare the class "MyClass"?		[1.0]
	a) Class myclass	c) class MyClass	
	b) class Myclass	d) Class MyClass	
38.	Which of the following is a valid variable in C#?		[1.0]
	a) class	c) _Class	
	b) Class	d) @class	
39.	Basic input and output operations are performed in C# using the methods of the _____ class in the _____ namespace.		[1.0]
	a) InputOutput,Class	c) Console, System	
	b) InputOutput, System	d) System, Console	
40.	C# provides an Unified Type System, which means that all data types are derived from _____ class.		[1.5]
	a) System	c) Variable	

	b) Object	d) Class	
41.	Which of the following are value types?		[1.0]
	a) Interface	c) Struct	
	b) String	d) Union	
42.	Which of the following will execute without errors at compile time.		[1.5]
	a) <pre>class Object{ static void main(){} }</pre>	d) <pre>class Object{ public static Main(){} }</pre>	
	b) class Object{ static void Main(){} }	e) <pre>class Object{ static void Main(){}; }</pre>	
	c) <pre>Class Object{ static void Main(){} }</pre>		
43.	Which of the following are valid identifiers?		[1.5]
	a) Void	c) @void	
	b) _void	d) _var	
44.	<pre>for(int i=0;i<2;i++){ for(int j=0;j<3;j++){ if(i==j) continue; } Console.WriteLine("i={0} j={1}",i,j); }</pre> <p>Which lines would be the part of output?</p>		[1.5]
	a) i=0 j=0	d) i=1 j=0	
	b) i=0 j=1	e) i=1 j=1	
	c) i=0 j=2		
45.	How can you initialize an array of three Boolean values?		[1.5]
	a) bool[] b=new bool[3];	c) <pre>bool[3] b={true,true,true};</pre>	
	b) bool[] b={true,true,true};	d) <pre>bool[3] b=new bool[3]={true,true,true};</pre>	
46.	<pre>using System; class MyClass { int Var1=1; int Var2; public static void Main(){ int LocalVar=3; MyClass m1=new MyClass(); Console.WriteLine(m1.Var1+m1.Var2+LocalVar); } }</pre> <p>The output of above code will be:</p>		[1.5]
	a) 4	c) The code does not compile because local variable is not initialized correctly.	

	b)	0	d)	The code does not compile because Var2 is not initialized.	
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47.	What is wrong with the following for statement? for(i=0;j=0, i<10; ++i,j+=i){ k+=i*j+j*j; }				[1.5]
	a)	It should include more than one statement in the statement block.	c)	It uses more than one loop index.	
	b)	There should be comma between i=0 and j=0.	d)	There should be a semicolon between j=0 and i<10.	
48.	What is wrong with the following for statement? for(i=0,,j=0; ++i,j+=i; i<10,++i;) k+=i*j+j*j;				[1.5]
	a)	There should be semicolon between i=0 and j=0.	c)	It uses more than one loop index.	
	b)	It should include more than one statement in the statement block.	d)	The syntax of for loop is improper.	
49.	Array X and Y have integer data types. If these arrays are initialized properly, what is wrong with the following statement? for(int var=0;var<0;++var){ if(x[var]>100) break; if(x[var]<0) continue; x[var+1]=x[var]+y[var]; }				[1.5]
	a)	It is illegal to have a break and continue statements within the same for statement.	c)	The prefix operator is not allowed in the iteration part of a for statement.	
	b)	The variable var cannot be declared in the initialization part of a for statement.	d)	There is nothing wrong with the statement.	
50.	If you ran the following program what lines would be included in its output? int var1,var2; for(var1=0,var2=0;var1+var2<20;++var1,var2+=1) { Console.WriteLine(var1+var2); }				[1.5]

	}				
	a)	5	c)	13	
	b)	8	d)	The program cannot compile because the for statement's syntax is incorrect.	
51.	<pre>using System; class Test { static void Main() { int @Main; int[] Static= new int[3]; @Main =100*Static[1]; Console.WriteLine(@Main); } }</pre> <p>What will be the output of above code?</p>				[2.0]
	a)	The code will return an error.	c)	The code will display 0.	
	b)	The code will display 100.	d)	The code cannot compile.	
52.	For decimal, the default value is				[2.0]
	a)	0.0d	b)	0.0m.	
53.	Value types differ from reference types as				[2.0]
	a)	data can be stored using value types but not in the reference type.	c)	variables of the reference types directly contain their data, whereas variables of the value types store references to objects.	
	b)	data in the value type variable is easily accessible.	d)	Variables of the value types directly contain their data, whereas variables of the reference types store references to objects.	
54.	<p>What would be the output of the following code fragment?</p> <pre>int x=0,y=4,z=5; if(x<2) if(y<4){ Console.WriteLine("One"); } else { Console.WriteLine("Two"); } else if(z>5){ Console.WriteLine("Three"); } else { Console.WriteLine("Four"); }</pre>				[2.0]

	a)	One	c)	Three	
	b)	Two	d)	Code will generate an error;	
55.	Which statement is true about the following code fragment? <pre> 1. int j=2,a=1; 2. switch(j){ 3. case 2: Console.WriteLine("Two");break; 4. case 1+a: Console.WriteLine("Two Two"); break; 5. default: Console.WriteLine(j); 6. }</pre>				[2.0]
	a)	The code is illegal because of expression at line 4.	c)	The output would be only the text "Two".	
	b)	The acceptable type for variable j as the argument to the switch () construct could be any of byte, short, int or long.	d)	The output would be only the text "Two" followed by the text "Two Two" followed by the text "2".	
56.	Which statement is true about the following code fragment? <pre> 1. int j=2; 2. switch(j){ 3. case 2: Console.WriteLine("Two");break; 4. case 2+1: Console.WriteLine("Three");break; 5. default : Console.WriteLine(j); }</pre>				[2.0]
	a)	The code is illegal because of expression at line 4.	c)	The output would be the text "Two" followed by the text "Three".	
	b)	The output would be only the text "Two".	d)	The output would be only the text "Three" followed by the text "Two" followed by the text "2".	
57.	<pre> char c='a'; switch(c){ case 'a': Console.WriteLine("A");break; default: Console.WriteLine("Default"); }</pre> What will happen if you attempt to compile and run code that includes this snippet?				[2.0]
	a)	The code will not compile because the switch statement does not have a legal expression.	c)	The code will compile and run and the letter "A" will be written to the standard output.	
	b)	The code will compile and run but nothing will be return on the standard output.	d)	The code will compile and run and the word "Default" will be written to the standard output.	
58.	Which of the following is a legal loop construction?				[2.5]

	(Choose all that apply)				
	a)	while(int i<7) { i++; Console.WriteLine("Value of i is {0}",i); }	c)	int j=0; for(int k=0;j+k!=10;j++,k++) { Console.WriteLine("j= {0} k={1}",j,k); }	
	b)	int i=3; while(i){ Console.WriteLine("Value of i is {0}",i); }	d)	int j=0; do{ Console.WriteLine("Value of i is {0}",j); if(j==3){continue loop;} }while(j<10);	
59.	int myVar=3; if (myVar<5) if(myVar<3) Console.WriteLine("<3"); else if (myVar>2) Console.WriteLine(">2"); else Console.WriteLine("Other"); What will appear on the standard output?				[2.5]
	a)	<3	c)	Other	
	b)	>2	d)	No output	
60.	Class Book { int num1=1; int num2; public static void Main(){ int num3=3; Console.WriteLine(num1+num2+num3r); } }				[2.5]
	a)	4	c)	The code does not compile because static method cannot access nonstatic variables Var1 and var2.	
	b)	0	d)	The code does not compile because Var2 is not initialized.	
61.	If you run the following program what lines would be included in its output? class A {				[2.5]

	<pre> public static void Main () { int i=0; switch (i) { default: System.Console.Write (i); break; case 1: System.Console.Write ("{0}",1); goto default; case 0: System.Console.Write ("{0}",0); goto case 1; } } </pre>				
	a)	100	c)	110	
	b)	010	d)	The program fails to compile.	
62.	A constructor is a special type of a _____ in a class.				[0.5]
	a)	variable	c)	method	
	b)	instance	d)	struct	
63.	The constructor without parameters is called _____.				[0.5]
	a)	main constructor	c)	default constructor	
	b)	zero valued constructor	d)	non-parameterized constructor	
64.	Static constructor has _____ parameter/s.				[0.5]
	a)	Only one	c)	no	
	b)	One or more			
65.	The object invokes the default constructor when no parameters were passed to it.				[0.5]
	a)	True	b)	False	
66.	If a class has a static constructor then it is automatically called when the class is loaded. Static constructors cannot be invoked explicitly.				[0.5]
	a)	True	b)	False	
67.	_____ enables the possibility for a function to be polymorphic when it is overridden in one or more inherited classes.				[0.5]
	a)	static	c)	overridden	
	b)	parameterized	d)	virtual	
68.	Which of the following sentences are true about Constructors?				[1.0]
	a)	The constructor can have the same name as that of its class.	c)	The constructor may or may not have name same as that of the name of its class.	
	b)	The constructor can have the same name as one of the methods in the class.	d)	The constructor must have the same name as that of the name of its class.	
69.	Which of the following methods can act as a constructor for the class				[1.0]

	“Object” that is used to create an object?			
	a) void object(){ }	c) Object Object(){ }		
	b) object(){ }	d) Object(){ }		
70.	Which of the following methods can act as a constructor for the class “Employee” that is used to create an object?			[1.0]
	a) void employee(int enmpno){ }	c) employee(int empno){ }		
	b) Employee (){ }	d) Employee(int empno){ }		
71.	Methods can be overloaded in C# by:			[1.0]
	a) Specifying different return types.	c) specifying different number of parameters		
	b) Specifying different names for the methods.	d) specifying different types of parameters		

72.	Which of the following is a legal constructor for the class Test.			[1.0]
	a) constructor Test(){ }	d) void Test(int a, string s, int f)		
	b) Test() { }	e) public Test(int a, int b){ }		
	c) Test(int a, int b){ }			
73.	Which of the following statements are true?			[1.0]
	a) A static constructor is a member that implements the actions required to initialize a class.	d) A static constructor cannot have accessibility modifiers.		
	b) Static constructors may or may not take parameters.	e) A static constructor for a class is called automatically when the object is accessed.		
	c) A static constructor can have public as a accessibility modifiers			
74.	<pre> class A { public static int X = B.Y + 1; } class B { public static int Y = A.X + 1; static void Main() { Console.WriteLine("X = {0}, Y = {1}", A.X, B.Y); } } </pre> <p>what will be the output of above code?</p>			[1.5]
	a) X=0, Y=1	c) X=2, Y=1		
	b) X=1, Y=2	d) The code fails to compile.		
75.	Which of the following statements are true with respect to Static constructors.			[1.5]

	a)	Static constructors cannot take parameters.	d)	Static constructors can be called explicitly or implicitly.	
	b)	Static constructors can have accessibility modifiers.	e)	Static constructors are called when the class is loaded.	
	c)	Static constructors cannot be called explicitly.	f)		
76.	Which of the following methods can be used as a destructor for a class "myClass".				[1.5]
	a)	myclass() { }	c)	~myClass(int I){ }	
	b)	MyClass() { }	d)	~myClass() { }	
77.	The method that overrides a method in the base class must be prefixed with the _____ keyword.				[1.5]
	a)	virtual	c)	Sealed	
	b)	new	d)	Overridden	

78.	Which of the following statements is correct for a method, which is overriding the following method: public void add(int a) {...}Select the most appropriate answer				[1.5]
	a)	the overriding method must return void	c)	the overriding method can return whatever it likes	
	b)	the overriding method must return int			
79.	What error does the following code generate? <pre>//No overload for method 'SuperClass' takes '0' arguments public class SuperClass { SuperClass(string s) { } } public class SubClass : SuperClass { SubClass(string s) { } public static void Main(){ SuperClass s = new SubClass("The"); } }</pre>				[1.5]
	a)	The code will generate no error.	c)	Incompatible type for '=' can't convert SubClass to SuperClass.	
	b)	No constructor matching SuperClass() found in class SuperClass	d)	Wrong number of arguments in constructor.	
80.	We have the following organization of classes. <pre>class Parent { } class DerivedOne :Parent { } class DerivedTwo :Parent { }</pre> Which of the following statements is correct for the following				[1.5]

	expression. Parent p = new Parent(); DerivedOne d1 = new DerivedOne(); DerivedTwo d2 = new DerivedTwo(); p = d1;				
	a)	Illegal at both compile and runtime,	c)	Legal at compile and runtime	
	b)	Legal at compile time, but fails at runtime,			
81.	Given these class definitions: class Superclass { } class Subclass1 extends Superclass { } and these objects: Superclass a = new Superclass(); Subclass1 b = new Subclass1(); which of the following explains the result of the statement: b = a; Select the correct statement.				[1.5]
	a)	Illegal at compile time	c)	Definitely legal at runtime	
	b)	Legal at compile time but possibly illegal at runtime			
82.	At least one _____ constructor must be declared to suppress the automatic generation of a default constructor.				[1.5]
	a)	Default	c)	Private	
	b)	Static	d)	Parameterized	
83.	Which of the following statements are true with respect to Static constructors?				[2.0]
	a)	A constructor-declaration may include a set of attributes.	d)	A class has no other constructors than those that are actually declared in the class	
	b)	A constructor-declaration may include a valid combination of the four access modifiers.	e)	Constructors are not inherited	
	c)	The identifier of a constructor-declarator must not name the class in which the constructor is declared.			
84.	What is the output of the following code?				[2.0]

	<pre> public class Test{ public Test(int i){ System.Console.WriteLine("Test(" +i +")"); } } public class Q12{ static Test t1 = new Test(1); Test t2 = new Test(2); static Test t3 = new Test(3); public static void Main(){ Q12 Q = new Q12(); } } </pre>				
	a)	Test(1) Test(2) Test(3)	c)	Test(2) Test(1) Test(3)	
	b)	Test(3) Test(2) Test(1)	d)	Test(1) Test(3) Test(2)	
85.	Which of the following statements are true with respect to destructors?				[2.0]
	a)	Destructors can be invoked explicitly.	c)	When an instance is destructed, the destructors in an inheritance chain are called in order, from most derived to least derived.	
	b)	A class has no other destructors than those that are actually declared in the class.	d)	Destructors are inherited.	
86.	Statement I: The sealed modifiers are not permitted in an enum declaration. Statement II: Delegate types are implicitly sealed				[2.0]
	a)	Both the statements are true.	c)	Only statement I is true.	
	b)	Both the statements are true.	d)	Only statement II is true.	
87.	1. public class Test { 2. void show() { 3. System.Console.WriteLine("non-static method in Test"); 4. } 5. } 6. public class Q3:Test { 7. static override void show() { 8. System.Console.WriteLine("Overridden non-static method in				[2.0]

	<pre> Q3"); 9. } 10. public static void Main() { a. Q3 a = new Q3(); 11. } } </pre>				
	a)	Compilation error at line 2.	c)	No compilation error, but runtime exception at line 3.	
	b)	Compilation error at line 7.	d)	No compilation error, but runtime exception at line 7.	
88.	<pre> class Test{ static void Main() { A.F(); B.F(); } } class A { <u>static A()</u> //static constructor { Console.WriteLine("Init A"); } public static void F() { Console.WriteLine("A.F"); } } class B { static B() { Console.WriteLine("Init B"); } public static void F() { Console.WriteLine("B.F"); } } </pre>				[2.0]
	a)	Init A A.F Init B B.F	c)	A.F Init B Init A A.F	
	b)	Init A Init B A.F B.F	d)	A.F B.F Init B Init A	

89.	//.Inconsistent accessibility: base class 'Test' is less //accessible than class 'Q3' → lỗi dòng 7 1. using System; 2. class Test { 3. void show() { 4. Console.WriteLine("non-static method in Test"); 5. } 6. } 7. public class Q3 : Test { 8. static void show() { 9. Console.WriteLine("Overridden non-static method in Q3"); 10.} 11. public static void main(String[] args) { 12. Q3 a = new Q3(); 13. Test t = new Test(); 14. } } The following code will give				[2.5]
	a)	Compilation error at line 8.	c)	No compilation error, but runtime exception at line 8.	
	b)	Compilation error at line 13.	d)	No compilation error, but runtime exception at line 13.	
90.	Which of the following statements are true with respect to overloading?				[2.5]
	a)	Overloading of methods permits a struct, or interface to declare multiple methods with the same name, provided the signatures of the methods are all unique.	c)	A class can have more than one method <u>called Main</u> with different number of arguments and data types.	
	b)	It is possible to overload solely based on return type or solely based on the inclusion or exclusion of the params modifier.	d)	Unary operators cannot be overloaded.	
91.	What will happen if you compile/run the following code? 1. public class Q21 { 2. int maxElements; 3. void Q21() { 4. maxElements = 100; 5. System.out.println(maxElements); 6. } 7. Q21(int i) { 8. maxElements = i; 9. System.out.println(maxElements); 10. }				[2.5]

	11. public static void Main() { 12. Q21 a = new Q21(); 13. Q21 b = new Q21(999); 14. } 15. }				
	a)	Prints 100 and 999.	c)	Compilation error at line 2, variable maxElements was not initialized.	
	b)	Prints 999 and 100.	d)	Compilation error at line 3.	

92.	What will be printed to standard output? <pre> class Super{ public int index = 5; public virtual void printVal() { System.Console.WriteLine("Super"); } } class Sub : Super{ int index = 2; public override void printVal() { System.Console.WriteLine("Sub"); } } public class Runner { public static void Main() { Super sup = new Sub(); System.Console.WriteLine(sup.index + ","); sup.printVal(); } } </pre>				[2.5]
	a)	The code will not compile.	c)	The code compiles and "5, Sub" is printed on the standard output.	
	b)	The code compiles and "5, Super" is printed on the standard output.	d)	The code compiles and "2, Super" is printed on the standard output.	
93.	Assume that Sub1 and Sub2 are both subclasses of class Super. Given the declarations: Super super = new Super(); Sub1 sub1 = new Sub1();				[2.5]

	Sub2 sub2 = new Sub2();			
	Which statement best describes the result of attempting to compile and execute the following statement: super = sub1;			
	a)	Compiles and definitely legal at runtime	c)	Compiles and may be illegal at runtime
	b)	Does not compile		
94.	Which statements on the <<< call >>> line are valid expressions?			[2.5]
	<pre> public class SuperClass { public int x; public int y; public SuperClass(){} } public class SubClass : SuperClass { private float f; public void m2() { return; } public SubClass() {} } public class T { public static void Main() { int i; float g; SubClass b = new SubClass(); <<< call >>> } } </pre>			
	a)	b.m2();	c)	i=b.x;
	b)	g=b.f;	d)	i=b.y;
95.	Which of the following is a valid method declaration?			[0.5]
	a)	public static virtual void Display() {}	c)	public void virtual Display(){}
	b)	public virtual void Display(){} 	d)	public virtual static void Display() {}
96.	The _____ declares a reference type that has abstract member only.			[0.5]
	a)	static class	c)	Interface
	b)	abstract class	d)	Delegates
97.	Abstract class cannot be directly instantiated but it can be used to create object references.			[0.5]
	a)	True	b)	False
98.	An interface is a pure abstract class.			[0.5]
	a)	True	b)	False

99.	The _____ method is used to assign some value to a data member in a class.				[0.5]
	a)	value	c)	get	
	b)	set	d)	find	
100.	public class A:B,C,D{ } The above code represents _____				[0.5]
	a)	multilevel interface	c)	multiple interface	
	b)	hierarchical interface	d)	multiple inheritance	