

# PASSTCERT

QUESTION & ANSWER

Higher Quality  
Better Service!

We offer free update service for one year  
[HTTP://WWW.PASSTCERT.COM](http://www.passtcert.com)

**Exam : 70-553(C#)**

**Title : UPGRADE:MCSD MS.NET  
Skills to MCPD Entpse App  
Dvlpr Pt1**

**Version : DEMO**

1. You are creating a class that uses unmanaged resources. This class maintains references to managed resources on other objects. You need to ensure that users of this class can explicitly release resources when the class instance ceases to be needed. Which three actions should you perform? (Each correct answer presents part of the solution. Choose three.)

- A. Define the class such that it inherits from the WeakReference class.
- B. Define the class such that it implements the IDisposable interface.
- C. Create a class destructor that calls methods on other objects to release the managed resources.
- D. Create a class destructor that releases the unmanaged resources.
- E. Create a Dispose method that calls System.GC.Collect to force garbage collection.
- F. Create a Dispose method that releases unmanaged resources and calls methods on other objects to release the managed resources.

**Answer:** BDF

2. You are creating an undo buffer that stores data modifications. You need to ensure that the undo functionality undoes the most recent data modifications first. You also need to ensure that the undo buffer permits the storage of strings only. Which code segment should you use?

- A. `Stack<string> undoBuffer = new Stack<string>();`
- B. `Stack undoBuffer = new Stack();`
- C. `Queue<string> undoBuffer = new Queue<string>();`
- D. `Queue undoBuffer = new Queue();`

**Answer:** A

3. You need to create a method to clear a Queue named q. Which code segment should you use?

- A. `foreach (object e in q) { q.Dequeue();}`
- B. `foreach (object e in q) { Enqueue(null);}`
- C. `q.Clear();`
- D. `q.Dequeue();`

**Answer:** C

4. You are developing an application that stores data about your company's sales and technical support teams. You need to ensure that the name and contact information for each person is available as a single collection when a user queries details about a specific team.

You also need to ensure that the data collection guarantees type safety. Which code segment should you use?

- A. `Hashtable team = new Hashtable();`  
`team.Add(1, "Hance");`  
`team.Add(2, "Jim");`

```
team.Add(3, "Hanif");  
team.Add(4, "Kerim");  
team.Add(5, "Alex");  
;team.Add(6, "Mark");  
team.Add(7, "Roger");  
team.Add(8, "Tommy");
```

B. `ArrayList team = new ArrayList();`

```
team.Add("1, Hance");  
team.Add("2, Jim");  
team.Add("3, Hanif");  
team.Add("4, Kerim");  
team.Add("5, Alex");  
team.Add("6, Mark");  
team.Add("7, Roger");  
team.Add("8, Tommy");
```

C. `Dictionary<int, string> team = new Dictionary<int, string>();`

```
team.Add(1, "Hance");  
team.Add(2, "Jim");  
team.Add(3, "Hanif");  
team.Add(4, "Kerim");  
team.Add(5, "Alex");  
team.Add(6, "Mark");  
team.Add(7, "Roger");  
team.Add(8, "Tommy");
```

D. `string[] team = new string[] {`

```
"1, Hance",  
"2, Jim",  
"3, Hanif",  
"4, Kerim",  
"5, Alex",  
"6, Mark",  
"7, Roger",  
"8, Tommy"};
```

**Answer: C**

5. You are developing a custom-collection class. You need to create a method in your class. You need to ensure that the method you create in your class returns a type that is compatible with the Foreach statement. Which criterion should the method meet?

- A. The method must return a type of either IEnumerator or IEnumerable.
- B. The method must return a type of IComparable.
- C. The method must explicitly contain a collection.
- D. The method must be the only iterator in the class.

**Answer: A**

6. You are writing a custom dictionary. The custom-dictionary class is named MyDictionary. You need to ensure that the dictionary is type safe. Which code segment should you use?

- A. `class MyDictionary : Dictionary<string, string>`
- B. `class MyDictionary : HashTable`
- C. `class MyDictionary : IDictionary`
- D. `class MyDictionary { ... } Dictionary<string, string> t = new Dictionary<string, string>(); MyDictionary dictionary = (MyDictionary)t;`

**Answer: A**

7. You are changing the security settings of a file named MyData.xml. You need to preserve the existing inherited access rules. You also need to prevent the access rules from inheriting changes in the future. Which code segment should you use?

- A. `FileSecurity security = new FileSecurity("mydata.xml", AccessControlSections.All);  
security.SetAccessRuleProtection(true, true);  
File.SetAccessControl("mydata.xml", security);`
- B. `FileSecurity security = new FileSecurity();  
security.SetAccessRuleProtection(true, true);  
File.SetAccessControl("mydata.xml", security);`
- C. `FileSecurity security = File.GetAccessControl("mydata.xml");  
security.SetAccessRuleProtection(true, true);`
- D. `FileSecurity security = File.GetAccessControl("mydata.xml");  
security.SetAuditRuleProtection(true, true);  
File.SetAccessControl("mydata.xml", security);`

**Answer: A**

8. You are developing an application that will deploy by using ClickOnce. You need to test if the application executes properly. You need to write a method that returns the object, which prompts the user to install a ClickOnce application. Which code segment should you use?

- A. return ApplicationSecurityManager.ApplicationTrustManager;
- B. return AppDomain.CurrentDomain.ApplicationTrust;
- C. return new HostSecurityManager();
- D. return SecurityManager.PolicyHierarchy();

**Answer: A**

9. You are developing an application that will use custom authentication and role-based security. You need to write a code segment to make the runtime assign an unauthenticated principal object to each running thread. Which code segment should you use?

- A. AppDomain domain = AppDomain.CurrentDomain;  
domain.SetPrincipalPolicy(PolicyLevel.WindowsPrincipal);
- B. AppDomain domain = AppDomain.CurrentDomain;  
domain.SetThreadPrincipal(new WindowsPrincipal(null));
- C. AppDomain domain = AppDomain.  
CurrentDomain;  
domain.SetAppDomainPolicy(  
PolicyLevel.CreateAppDomainLevel());
- D. AppDomain domain = AppDomain.  
CurrentDomain;domain.  
SetPrincipalPolicy(  
PolicyLevel.UnauthenticatedPrincipal);

**Answer: D**

10. You are writing code for user authentication and authorization. The username, password, and roles are stored in your application data store. You need to establish a user security context that will be used for authorization checks such as `IsInRole`. You write the following code segment to authorize the user.

```
if (!TestPassword(userName, password))  
throw new Exception("could not authenticate user");  
String[] userRolesArray = LookupUserRoles(userName);
```

You need to complete this code so that it establishes the user security context. Which code segment should you use?

- A. GenericIdentity ident = new GenericIdentity(userName);  
GenericPrincipal currentUser = new GenericPrincipal(ident, userRolesArray);  
Thread.CurrentPrincipal = currentUser;
- B. WindowsIdentity ident = new WindowsIdentity(userName);  
WindowsPrincipal currentUser = new WindowsPrincipal(ident);

```
Thread.CurrentPrincipal = currentUser;
```

```
C. NTAccount userNTName = new NTAccount(userName);
```

```
GenericIdentity ident = new GenericIdentity(userNTName.Value);
```

```
GenericPrincipal currentUser= new GenericPrincipal(ident, userRolesArray);
```

```
Thread.CurrentPrincipal = currentUser;
```

```
D. IntPtr token = IntPtr.Zero;
```

```
token = LogonUserUsingInterop(userName, encryptedPassword);
```

```
WindowsImpersonationContext ctx = WindowsIdentity.Impersonate(token);
```

**Answer: A**

11. You are developing a method to hash data with the Secure Hash Algorithm. The data is passed to your method as a byte array named message. You need to compute the hash of the incoming parameter by using SHA1. You also need to place the result into a byte array named hash. Which code segment should you use?

```
A. SHA1 sha = new SHA1CryptoServiceProvider();byte[] hash = null;sha.TransformBlock( message, 0, message.Length, hash, 0);
```

```
B. SHA1 sha = new SHA1CryptoServiceProvider();byte[] hash = BitConverter.GetBytes(sha.GetHashCode());
```

```
C. SHA1 sha = new SHA1CryptoServiceProvider();byte[] hash = sha.ComputeHash(message);
```

```
D. SHA1 sha = new SHA1CryptoServiceProvider();sha.GetHashCode();byte[] hash = sha.Hash;
```

**Answer: C**

12. You are developing an auditing application to display the trusted ClickOnce applications that are installed on a computer. You need the auditing application to display the origin of each trusted application. Which code segment should you use?

```
A. ApplicationTrustCollection trusts;trusts = ApplicationSecurityManager.UserApplicationTrusts;foreach (ApplicationTrust trust in trusts) { Console.WriteLine(trust.ToString());}
```

```
B. ApplicationTrustCollection trusts;trusts = ApplicationSecurityManager.UserApplicationTrusts;foreach (ApplicationTrust trust in trusts) { Console.WriteLine(trust.ExtraInfo.ToString());}
```

```
C. ApplicationTrustCollection trusts;trusts = ApplicationSecurityManager.UserApplicationTrusts;foreach (ApplicationTrust trust in trusts) { Console.WriteLine(trust.ApplicationIdentity.FullName);}
```

```
D. ApplicationTrustCollection trusts;trusts = ApplicationSecurityManager.UserApplicationTrusts;foreach (object trust in trusts) { Console.WriteLine(trust.ToString());}
```

**Answer: C**

13. You are developing a method to call a COM component. You need to use declarative security to explicitly request the runtime to perform a full stack walk. You must ensure that all callers have the

required level of trust for COM interop before the callers execute your method. Which attribute should you place on the method?

- A. [SecurityPermission( SecurityAction.Demand, Flags=SecurityPermissionFlag.UnmanagedCode)]
- B. [SecurityPermission( SecurityAction.LinkDemand, Flags=SecurityPermissionFlag.UnmanagedCode)]
- C. [SecurityPermission( SecurityAction.Assert, Flags = SecurityPermissionFlag.UnmanagedCode)]
- D. [SecurityPermission( SecurityAction.Deny, Flags = SecurityPermissionFlag.UnmanagedCode)]

**Answer: A**

14. You are creating an assembly named Assembly1. Assembly1 contains a public method. The global cache contains a second assembly named Assembly2. You must ensure that the public method is only called from Assembly2. Which permission class should you use?

- A. GacIdentityPermission
- B. PublisherIdentityPermission
- C. DataProtectionPermission
- D. StrongNameIdentityPermission

**Answer: D**

15. You create a DirectorySecurity object for the working directory. You need to identify the user accounts and groups that have read and write permissions. Which method should you use on the DirectorySecurity object?

- A. the GetAuditRules method
- B. the GetAccessRules method
- C. the AccessRuleFactory method
- D. the AuditRuleFactory method

**Answer: B**

16. You are developing an application that runs by using the credentials of the end user. Only users who are members of the Administrator group get permission to run the application. You write the following security code to protect sensitive data within the application.

```
bool isAdmin = false;
```

```
WindowsBuiltInRole role = WindowsBuiltInRole.Administrator;
```



..

if (!isAdmin) throw new Exception("User not permitted");

You need to add a code segment to this security code to ensure that the application throws an exception if a user is not a member of the Administrator group. Which code segment should you use?

- A. `WindowsPrincipal currentUser = (WindowsPrincipal)Thread.CurrentPrincipal;`  
`isAdmin = currentUser.IsInRole(role);`
- B. `WindowsIdentity currentUser = WindowsIdentity.GetCurrent();`  
`foreach (IdentityReference grp in currentUser.`  
`Groups) {NTAccount grpAccount = ((NTAccount)grp.`  
`Translate(typeof(NTAccount)));`  
`isAdmin = grp.Value.Equals(role); if (isAdmin) break;}`
- C. `GenericPrincipal currentUser = (GenericPrincipal) Thread.CurrentPrincipal;`  
`isAdmin = currentUser.IsInRole(role.ToString());`
- D. `WindowsIdentity currentUser = (WindowsIdentity)Thread.CurrentPrincipal.Identity;`  
`isAdmin = currentUser.Name.EndsWith("Administrator");`

**Answer: A**

17. You are developing a server application that will transmit sensitive information on a network. You create an `X509Certificate` object named `certificate` and a `TcpClient` object named `client`. You need to create an `SslStream` to communicate by using the Transport Layer Security 1.0 protocol. Which code segment should you use?

- A. `SslStream ssl = new SslStream(client.GetStream());`  
`ssl.AuthenticateAsServer( certificate, false, SslProtocols.None, true);`
- B. `SslStream ssl = new SslStream(client.GetStream());`  
`ssl.AuthenticateAsServer( certificate, false, SslProtocols.Ssl3, true);`
- C. `SslStream ssl = new SslStream(client.GetStream());`  
`ssl.AuthenticateAsServer( certificate, false, SslProtocols.Ssl2, true);`
- D. `SslStream ssl = new SslStream(client.GetStream());`  
`ssl.AuthenticateAsServer( certificate, false, SslProtocols.Tls, true);`

**Answer: D**

18. You are developing a method to hash data for later verification by using the MD5 algorithm. The data is passed to your method as a byte array named `message`. You need to compute the hash of the incoming parameter by using MD5. You also need to place the result into a byte array. Which code segment should you use?

- A. `HashAlgorithm algo = HashAlgorithm.Create("MD5");`

```
byte[] hash = algo.ComputeHash(message);
```

B. `HashAlgorithm algo = HashAlgorithm.Create("MD5");`

```
byte[] hash = BitConverter.GetBytes(algo.GetHashCode());
```

C. `HashAlgorithm algo; algo = HashAlgorithm.Create(message.ToString());`

```
byte[] hash = algo.Hash;
```

D. `HashAlgorithm algo = HashAlgorithm.Create("MD5"); byte[] hash = null;`

```
algo.TransformBlock(message, 0, message.Length, hash, 0);
```

**Answer: A**

19. You are developing a utility screen for a new client application. The utility screen displays a thermometer that conveys the current status of processes being carried out by the application. You need to draw a rectangle on the screen to serve as the background of the thermometer as shown in the exhibit. The rectangle must be filled with gradient shading. (Click the Exhibit button.) Which code segment should you choose?



A. `Rectangle rectangle = new Rectangle(10, 10, 450, 25);`

```
LinearGradientBrush rectangleBrush = new LinearGradientBrush(rectangle,
```

```
Color.AliceBlue, Color.CornflowerBlue,
```

```
LinearGradientMode.ForwardDiagonal);
```

```
Pen rectanglePen = new Pen(rectangleBrush);
```

```
Graphics g = this.CreateGraphics(); g.DrawRectangle(rectanglePen, rectangle);
```

B. `Rectangle rectangle = new Rectangle(10, 10, 450, 25);`

```
LinearGradientBrush rectangleBrush = new LinearGradientBrush(rectangle,
```

```
Color.AliceBlue, Color.CornflowerBlue,
```

```
LinearGradientMode.ForwardDiagonal);
```

```
Pen rectanglePen = new Pen(rectangleBrush);
```

```
Graphics g = this.CreateGraphics();
```

```
g.FillRectangle(rectangleBrush, rectangle);
```

C. `RectangleF rectangle = new RectangleF(10f, 10f, 450f, 25f);`

```
Point[] points = new Point[] {new Point(0, 0),
```

```
new Point(110, 145)};
```

```
LinearGradientBrush rectangleBrush = new LinearGradientBrush(rectangle, Color.AliceBlue,
```

```
Color.CornflowerBlue,  
LinearGradientMode.ForwardDiagonal);  
Pen rectanglePen = new Pen(rectangleBrush);  
Graphics g = this.CreateGraphics();  
g.DrawPolygon(rectanglePen, points);  
D. RectangleF rectangle = new RectangleF(10f, 10f, 450f, 25f);  
SolidBrush rectangleBrush = new SolidBrush(Color.AliceBlue);  
Pen rectanglePen = new Pen(rectangleBrush);  
Graphics g = this.CreateGraphics();  
g.DrawRectangle(rectangleBrush, rectangle);
```

**Answer: B**

20. You create an application to send a message by e-mail. An SMTP server is available on the local subnet. The SMTP server is named smtp.contoso.com.

To test the application, you use a source address, me@contoso.com, and a target address, you@contoso.com. You need to transmit the e-mail message. Which code segment should you use?

- A. MailAddress addrFrom = new MailAddress("me@contoso.com", "Me");  
MailAddress addrTo = new MailAddress("you@contoso.com", "You");  
MailMessage message = new  
MailMessage(addrFrom, addrTo);  
message.Subject = "Greetings!";message.Body = "Test";message.Dispose();
- B. string strSmtpClient = "smtp.contoso.com";  
string strFrom = "me@contoso.com";  
string strTo = "you@contoso.com";  
string strSubject = "Greetings!";string strBody = "Test";  
MailMessage msg = new MailMessage(strFrom, strTo, strSubject, strSmtpClient);
- C. MailAddress addrFrom = new MailAddress("me@contoso.com");  
MailAddress addrTo = new MailAddress("you@contoso.com");  
MailMessage message = new MailMessage(addrFrom, addrTo);  
message.Subject = "Greetings!";message.Body = "Test";  
SmtpClient client = new SmtpClient("smtp.contoso.com");  
client.Send(message);
- D. MailAddress addrFrom = new MailAddress("me@contoso.com", "Me");  
MailAddress addrTo = new MailAddress("you@contoso.com", "You");  
MailMessage message = new MailMessage(addrFrom, addrTo);

```
message.Subject = "Greetings!";message.Body = "Test";  
SocketInformation info = new SocketInformation();  
Socket client = new Socket(info);  
System.Text.ASCIIEncoding enc = new System.Text.ASCIIEncoding();  
byte[] msgBytes = enc.GetBytes(message.ToString());  
client.Send(msgBytes);
```

**Answer: C**