Exam 10 Azure Chapter 2 to 5 MCQ

1. **You create a LINQ query as follows. Which of the statements is correct?**

**var query = (from acct in context.Accounts**

**where acct.AccountAlias == "Primary"**

**select Acct).FirstOrDefault();**

A. A foreach loop is needed before this query executes against the database.

B. NavigationProperty needs to be referenced before this query executes against the database.

C. The query returns results immediately.

D. It depends on whether the LazyLoadingEnabled property is set.

**2. What happens if you attempt to Attach an entity to a context when it already exists in the context with an EntityState of unchanged?**

**A.** A copy of the entity is added to the context with an EntityState of unchanged.

**B.** A copy of the entity is added to the context with an EntityState of Added.

**C.** Nothing happens and the call is ignored.

**D.** The original entity is updated with the values from the new entity, but a copy is not made. The entity has an EntityState of Unchanged.

**3. You need to execute a query against a SQL Server database and populate a set of objects. The retrieval operation is time-consuming, and users are complaining about sluggishness. You need to make sure the application doesn’t seem to “hang” while the operation is taking place. Which of the following would accomplish that task? (Choose all that apply.)**

**A.** Use the ExecuteReader method of the EntityCommand class.

**B.** Use the ExecuteScalarAsync method of the EntityCommand class.

**C.** Use the ExecuteReaderAsync method of the SqlCommand class.

**D.** Use the ExecuteReaderAsync method of the System.Data.OleDb.Command class.

**4. The application you’re working on uses the EF to generate a specific DbContext instance. The application enables users to edit several items in a grid and then submit the changes. Because the database is overloaded, you frequently experience situations that result in only partial updates. What should you do?**

**A.** Call the *SaveChanges* method of the *DbContext* instance, specifying the *UpdateBehavior.All* enumeration value for the *Update* behavior.

**B.** Use a *TransactionScope* class to wrap the call to update on the *DbContext* instance.

**C.** Create a Transaction instance by calling the *BeginTransaction* method of the *DbContext* Database property. Call the *SaveChanges* method; if it is successful, call the *Commit* method of the transaction; if not, call the Rollback method.

**D.** Use a *TransactionScope* class to wrap the call to *SaveChanges* on the *DbContext*. Call *Complete* if *SaveChanges* completes without an exception.

**5. Which of the following are true about SqlConnection objects? (Choose all that apply.)**

**A.** They should be opened at the last possible moment and closed at the earliest opportunity.

**B.** They should be opened as early as possible and closed as early as possible.

**C.** They should be opened as late as possible and closed as late as possible.

**D.** As long as the Close statement is called in a catch block, the object will be closed and disposed of correctly.

**6. What are the advantages of a compiled query?**

**A.** None. Every time you run the query you will hit the database.

**B.** The results of the query are cached making the querying a lot faster.

**C.** The translation of your query into SQL is cached.

**D.** None. You can’t change any of the parameters you use in a query, rendering the compiled query useless.

**7. You’ve implemented a method named GetQuestionText that can throw an IndexOutOfRangeException a SqlException. Which of the following items would correctly expose these exceptions?**

**A.** [FaultContract(typeof(IndexOutOfRangeException))] [FaultContract(typeof(SqlException))] [OperationContract] String GetQuestionText(Int32 questionNumber);

**B.** [FaultMapping(new FaultMappingCollection[]{IndexOutOfRangeException, SqlException})] [OperationContract] String GetQuestionText(Int32 questionNumber);

**C.** [FaultMapping(new FaultMappingCollection[]{typeof(IndexOutOfRangeExcepti on), typeof(SqlException)})] [OperationContract] String GetQuestionText(Int32 questionNumber);

**D.** [FaultContract(IndexOutOfRangeException)] [FaultContract(SqlException)] [OperationContract] String GetQuestionText(Int32 questionNumber);

**8. Which of the following are true regarding WCF Services and their contracts? (Choose all that apply.)**

**A.** Each service must have a corresponding Interface class.

**B.** The ServiceContract and OperationContract attributes must be applied to the contract, not the implementation.

**C.** The ServiceContract and OperationContract attributes can be applied to either the contract or the implementation.

**D.** A complex type does not need to be serializable as long as all its properties are serializable

9. Which of the following is not a benefit of configuration?

**A.** Ability to change Endpoint URIs

**B.** Ability to modify security settings

**C.** Ability to redefine metadata exchange

**D.** Ability to add new method definitions

**10. You are creating a CustomBinding that will be consumed only by .NET clients. Perfor­mance is the primary concern. Which of the following are true? (Choose all that apply.)**

**A.** You must define a TextMessageEncodingBindingElement to the binding.

**B.** You must define a BinaryMessageEncodingBindingElement to the binding.

**C.** You must not define either the TextMessageEncodingBindingElement or the MTOMMessageEncodingBindingElement.

**D.** You must define the BinaryMessageEncodingBindingElement.

**11. The ServiceOperation attribute is defined on both the service implementation and the interface definition. Each of the property settings is explicitly defined, and each prop­erty matches its counterpart in the other definition. Which of the following is true?**

**A.** As long as the property values are identical or don’t conflict with each other, the service will behave as desired.

**B.** The items defined on the interface will override the ones on the implementation class.

**C.** The items defined in the implementation class will override the ones on the inter­face definition.

**D.** The service will throw an InvalidOperationException because this attribute cannot be defined on both items.

**12. You are building a client to consume a WCF Service named TestService, and many of the methods have return types that are generic list collections. You are expecting List<Type> return types for the calls, but the proxy class has implemented each as an array. You want this type implemented specifically as the List<Type>. What should you do? (Choose all that apply.)**

**A.** Use the ToList<> extension method at the end of each call to the methods that are currently being returned as arrays.

**B.** Change the Settings in the Add Service Reference dialog box using the Advanced screen. Change the Collection type to List.

**C.** Regenerate the proxy class after changing the settings.

**D.** Use the Add Web Reference dialog box to generate the proxy because it automati­cally respects the return type definitions.

**13. You want to use a SharedSecretToken for authentication. Which method and param­eters do you use?**

**A.** TokenProvider.CreateSharedSecretTokenProvider(namespace, key)

**B.** TokenProvider.CreateSamlTokenProvider(samltoken)

**C.** TokenProvider.CreateSharedSecretTokenProvider(owner, key)

**D.** TokenProvider.CreateWindowsTokenProvider(uris)

**14. You have the following method signature. You are told that it should execute as quickly as possible and advised it would be a good candidate for a OneWay method. Which of the following are true (choose all that apply):**

**[OperationContract(IsOneWay = true)]**

**Boolean LogMessage(String messsage);**

**A.** This method is not a valid candidate to execute with the OneWay pattern because it has a return type.

**B.** This method is not a valid candidate to execute with the OneWay pattern because it accepts a parameter.

**C.** Simple logging operations that just accept a String parameter and return a Success or Failure message are ideally suited for the OneWay pattern. However, to work a Callback contract would be needed to work properly.

**D.** There’s not enough information to know for sure whether this method would be a good candidate to use to implement the OneWay pattern.

**15. Your service needs to support real-time communication between client and service. Which is true?**

**A.** Streaming should be enabled.

**B.** A Binding that supports duplexing must be implemented.

**C.** A stateless protocol can be supported but the client must implement threading.

**D.** Duplexing and streaming must be implemented together.

**16. You are developing a new WCF Service. Each time a client initiates a request, you need to create a service instance to support it. What should you do?**

**A.** Set the InstanceContextMode to Singleton.

**B.** Set the ConcurrencyMode to PerCall.

**C.** Set the InstanceContextMode to PerCall.

**D.** Set the ConcurrencyMode’s scope to User and set the InstanceContextMode to PerCall.

**16. You have an ASP.NET MVC Web API that processes new customer inquiries. The cli­ent applications are intended to be very focused in scope and centered on just a few operations. A decision was just made that, for now, the API needs to simply allow data collected from a Web Form to be submitted to a SQL Server database. Which of the following is needed to allow form data to be submitted to the server?**

**A.** HttpGet

**B.** HttpHead

**C.** HttpPost

**D.** HttpPut

**17. Your ASP.NET Web API application needs to be able to allow action methods to oper­ate through multiple HTTP Actions (namely HttpPost and HttpPut). How should this be accomplished?**

**A.** Decorate the method with both the HttpGet and the HttpPost attribute.

**B.** Decorate the method with an HttpGet and an HttpPut attribute.

**C.** Decorate the method with the ActionNames attribute using the values of HttpPut and HttpPost.

**D.** Decorate the method with the AcceptVerbs attributes, including HttpPut and Http­Post.

**18. You want to enable HTTPS for your Web API, and you want to make sure that none of the developers forgets about this requirement. How do you do this?**

**A.** Create a custom ApiController base class from which all developers need to inherit.

**B.** Create an HttpsRequiredAttribute and add it to each controller.

**C.** Create an HttpsRequiredAttribute and add it to the global collection of attributes.

**D.** Use MakeCert.exe to create an HTTPS certificate.

**19. You are building a Web API to be used by third-party websites, and you want to reach as many users as possible. You want to protect your service from XSRF attacks. Which requirement do you state for your third parties?**

**A.** Force them to use ASP.NET MVC so you can easily authenticate requests.

**B.** Require them to include both a cookie and a form value with a unique token.

**C.** Use the ValidateAntiForgeryToken attribute on your Web API service.

**D.** Use Windows Authentication.

**20. You want to extend the default authentication mechanism of Web API. You want to have an attribute that you can place on a couple of action methods to log nonauthen­ticated requests. What do you do?**

**A.** Inherit from IAuthorizationFilter to implement the custom logic.

**B.** Inherit from AuthorizeAttribute to implement the custom logic.

**C.** Inherit from AuthorizeFilterAttribute to implement the custom logic.

**D.** Create an HttpMessageHandler that you attach to specific routes.

**21. You are changing the hosting of your Web API to use a Windows Service. Originally, the configuration was automatically generated by the Visual Studio template. What do you need to do to make this work?**

**A.** Nothing; the existing configuration will work.

**B.** Copy the existing configuration to a new class in the host project.

**C.** Add a new class of type HttpSelfHostConfiguration. Use the Initialize method to call the MapHttpRoute method.

**D.** Add a new class of type HttpSelfHostConfiguration. Use the Routes property to call the MapHttpRoute method.

**22. You are working for a large company that has a lot of maintenance engineers on the road. You are going to develop an app to support their work remotely with publicly available data. You are looking at your deployment options. You know the app will be used during office times. Throughout the day, you will have five thousand users of your service. What deployment option do you choose?**

**A.** You buy extra servers for your on-premise data center.

**B.** You use Azure Cloud Services to host your Web API as a Web Role.

**C.** You use Azure websites.

**D.** You deploy Azure Virtual Machines to host your Web API.

**23. The HttpClient class you have implemented frequently receives error codes, but the application is not responding to them. What should you do?**

**A.** Trap the OnError event of the request.

**B.** Set the EnsureSuccessStatusCode property to true and implement an exception handler in the OnError event.

**C.** Call the EnsureSuccessStatusCode method and trap the HttpRequestException exception.

**D.** Check the ResultStatusCode property and throw an exception if one of the error values is present.

**24. You have multiple HttpClient calls that can run independently of each other. You want to execute them as fast as possible. What should you do?**

**A.** Use the Result property of each HttpClient call to get the result as fast as possible.

**B.** Use async/await to make sure that the calls run asynchronously.

**C.** Use Task.WaitAll to execute the tasks in parallel.

**D.** You can’t execute asynchronous tasks in parallel.

**25. You need to deploy an application that requires some changes to the registry. Which deployment strategy do you use?**

**A.** Copy the website.

**B.** FTP client.

**C.** Web Deploy.

**D.** A web farm.

**26. You are deploying a new cloud service with only a web role, and you want to make sure that you get the maximum guaranteed uptime, even during upgrades. How many instances do you need?**

**A.** 1

**B.** 2

**C.** 3

**D.** 4

**27. You want to be able to communicate directly from your web role to your worker role, and you want to make sure that your worker role stays secure by disallowing public access. What do you do?**

**A.** Add an InputEndpoint to the web role in your ServiceConfiguration.cscfg file.

**B.** Add an InputEndpoint to your worker role in your ServiceConfiguration.cscfg file.

**C.** Add an InternalEndPoint to the web role in your ServiceConfiguration.cscfg file.

**D.** Add an InternalEndPoint to your worker role in your ServiceConfiguration.cscfg file.

**28. You want to follow the recommended best practices for configuring your Windows Azure Guest OS. Which values do you use? (Choose all that apply.)**

**A.** osFamily=”3”

**B.** osFamily=”1”

**C.** osVersion=”\*”

**D.** osVersion=”WA-GUEST-OS-2.12\_201208-02”

**29. You want to remove your debug element from the web.config file by using web.config transformations. Which syntax do you use?**

**A.** <compilation xdt:Transform=”Replace” />

**B.** <compilation xdt:Transform=”RemoveAttributes(debug)” xdt:Locator=”Condition(@ debug=’true’)” />

**C.** <compilation xdt:Transform=”RemoveAttributes(debug)” xdt:Locator=”Match(name)” />

**D.** <compilation xdt:Transform=”RemoveAttributes(debug)” />

**30. You are using parameters for your Web Deploy. You want to automate the creation of the SetParameters file and make sure that it has the correct values. What do you use?**

**A.** XmlPoke with MSDeploy.

**B.** MSDeploy with the setParamFile attribute.

**C.** XmlPoke with MSBuild.

**D.** This is not possible. You need to edit the SetParameters file manually.

**31. You want to package a custom package that uses the lib, content, and tool folders. Which command do you use?**

**A.** nuget pack MyProject.csproj

**B.** nuget spec MyAssembly.dll

**C.** nuget pack package.nuspec

**D.** nuget push package.nupkg

**32. You are using the command line, and you want to see whether your deployment is configured correctly. What do you use?**

**A.** postSync

**B.** preSync

**C.** verb

**D.** whatif

**33. You want to create and deploy a package from the command line. Which command do you use?**

**A.** MSBuild “MyProjectName.csproj” /T:Package /P:Configuration=Release

**B.** MSBuild “MyProjectName.csproj” /T:Package

**C.** MSBuild “MyProjectName.csproj” /T:Package /P:Configuration=Release;DeployOnBuild=True

**D.** MSBuild “MyProjectName.csproj” /P:Configuration=Release;DeployOnBuild=True

**34. You are building a strong-named assembly and you want to reference a regular assem­bly to reuse some code you built. What should you do?**

**A.** You first need to put the assembly in the GAC.

**B.** Nothing. Referencing another assembly is always possible.

**C.** You need to sign the other assembly before using it.

**D.** You need to use the public key token of the other assembly to reference it.

**35. You are building an assembly that will be used by a couple of server applications. You want to make the update process of this assembly as smooth as possible. Which steps should you take? (Choose all that apply.)**

**A.** Run aspnet\_intern.

**B.** Deploy the assembly to the GAC.

**C.** Add an assemblyBinding section to each client application that points to the loca­tion of the assembly.

**D.** Strongly name the assembly.

Extra MCQ

**36. Windows Azure offers you three ways to update your application:**

1. Delete and redeploy
2. In-place update
3. VIP Swap

37. By default, you have a maximum of five update domains.

You can control how many up­grade domains you have by using the upgradeDomainCount attribute in your ServiceDefini­tion configuration file.

You can have a maximum of 20 upgrade domains.

38. There are four major areas of service changes you are likely to encounter while Versioning different types of contracts

1. 1. Changes to a contract
2. 2. Changes to an address
3. 3. Bindings are added or removed
4. 4. Implementations change

39. The XCopy DOS command has the following syntax:

1. xcopy /I /S /E <source path> <destination path>