Question 1
How should you build the method?
You are developing a WCF Data Services service in Visual Studio 2012 to display movie information from a SQL Server database that changes every 24 hours. The service is defined in the following class.

```
public class MovieService : DataService<MovieEntities>
{
    public static void InitializeService(DataServiceConfiguration config)
    {
        config.SetEntitySetAccessRule("Movies", EntitySetRights.AllRead);
    }
}
```

The application contains the following Entity Framework model.

The service must only return data for movies that are currently in theaters.
You need to add a method to the MovieService class to filter the data.
How should you build the method? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

```
public class MovieService : DataService<MovieEntities>
{
    public static void InitializeService(DataServiceConfiguration config)
    {
        config.SetEntitySetAccessRule("Movies", EntitySetRights.AllRead);
    }

    [Function]<Func<Movie, bool>> ApplyTheaterFilter()
    {
        return movie => movie.IsInTheaters == true;
    }
}
```

Correct Answer:
Correct Answer:
Explanation/Reference:

**Question 3**
What should you do?
You are developing an ASP.NET MVC Web API application.
The method names of the Web API must match naming guidelines for RESTful services.
You need to create methods to support standard insert, select, update, and delete operations in an HTTP service.
What should you do? (To answer, drag the appropriate HTTP methods to the correct row in the table in the answer area. Each HTTP method may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

<table>
<thead>
<tr>
<th>Action</th>
<th>HTTP method</th>
<th>Relative URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrieve a list of all customers</td>
<td>GET</td>
<td>/api/customers</td>
</tr>
<tr>
<td>Retrieve a customer by id</td>
<td>GET, PUT</td>
<td>/api/customers/id</td>
</tr>
<tr>
<td>Retrieve a customer by category</td>
<td>GET</td>
<td>/api/customer/?category=category</td>
</tr>
<tr>
<td>Create a new customer</td>
<td>POST</td>
<td>/api/customers</td>
</tr>
<tr>
<td>Update a customer</td>
<td>PUT</td>
<td>/api/customers/id</td>
</tr>
<tr>
<td>Remove a customer</td>
<td>DELETE</td>
<td>/api/customers/id</td>
</tr>
</tbody>
</table>

Correct Answer:
Question 4
What should you do?
You are developing an ASP.NET Web API application that will be consumed by a web browser via a composite application that is served from another web domain.
You need to configure the Web API.
What should you do? (To answer, drag the appropriate XML elements to the correct location or locations in the answer area. Each XML element may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

Correct Answer:
Question 5
What should you do?
You are developing an ASP.NET Web API action method.
The action method must return the following JSON in the message body:
{"Name":"Fabrikam","Vendor Id": 9823, "Items": ["Apples", "Oranges"] }
You need to return an anonymous object that is serialized to JSON.
What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

Correct Answer:

```

```

Explanation/Reference:

Question 6
Which code segment should you use?
You are developing an ASP.NET MVC application. The application is a loan processing system that uses the ADO.NET Entity Framework against a SQL Server database. It has a controller that loads a page that displays all loans along with rate information. Lazy loading has been disabled.
The Loan class is shown below.

```

```
You need to return the loans and rate information in a single round trip to the database.
Which code segment should you use?
Question 7
Which code segment should you use?
You are developing a library management application that uses the ADO.NET Entity Framework against a SQL Server database. The application has a method that returns checkouts filtered by date.
The Book class is shown below.
```csharp
public partial class Book
{
    ...
    public Nullable<System.DateTime> CheckoutDate { get; set; }
    ...
}
```
You must filter the data on the SQL server before it is returned to the application server.
You need to return books checked out more recently than the entered date.
Which code segment should you use?
```
A. Option A
B. Option B
C. Option C
D. Option D
```
Correct Answer: A
Explanation/Reference:
The difference is that IQueryable<T> is the interface that allows LINQ-to-SQL (LINQ-to-anything really) to work. So if you further refine your query on an IQueryable<T>, that query will be executed in the database, if possible.
For the IEnumerable<T> case, it will be LINQ-to-object, meaning that all objects matching the original query will have to be loaded into memory from the database.

Question 8
What should you do?
You are developing a WCF service.
You need to create a duplex contract.
What should you do? (Each correct answer presents part of the solution. Choose all that apply.)
A. Apply the MessageContractAttribute attribute to every public method signature included in the appropriate contract.
B. Create an interface for the client-side duplex contract.
C. Create an interface for the server-side duplex contract.
D. Apply the MessageContractAttribute attribute to the appropriate interface.
E. Apply the ServiceContractAttribute attribute to the appropriate interface. Then, apply the OperationContractAttribute attribute to every public method signature included in that contract.
F. Set the CallbackContract property to the appropriate interface.
Correct Answer: CEF
Explanation/Reference:
To create a duplex contract
1. (C) Create the interface that makes up the server side of the duplex contract.
2. (E) Apply the ServiceContractAttribute class to the interface.
3. Declare the method signatures in the interface.
4. (E) Apply theOperationContractAttribute class to each method signature that must be part of the public contract.
5. Create the callback interface that defines the set of operations that the service can invoke on the client.
6. Declare the method signatures in the callback interface.
7. Apply theOperationContractAttribute class to each method signature that must be part of the public contract.
8. (F) Link the two interfaces into a duplex contract by setting the CallbackContract property in the primary interface to the type of the callback interface.
Reference: How to: Create a Duplex Contract

Question 9
Which isolation level should you use?
You are developing an ASP.NET MVC application that reads and writes data from a SQL Server database.
You need to maintain data integrity including retrieving identical sets across reads in all situations that use transactions.
Which isolation level should you use?
A. Repeatable
B. Serializable
C. ReadUncommitted
D. ReadCommitted
Correct Answer: A
Explanation/Reference:
REPEATABLE READ
Specifies that statements cannot read data that has been modified but not yet committed by other transactions and that no other transactions can modify data that has been read by the current transaction until the current transaction completes.

Question 10
Which code segment should you use?
You are developing an ASP.NET MVC application. The application is an order processing system that uses the ADO.NET Entity Framework against a SQL Server database. It has a controller that loads a page that displays customers. Customers are filtered on Country and, if provided, on CompanyName.
The Customer class is shown below.
```csharp
public partial class Customer
{
    ...
    public string CustomerID { get; set; }
    public string CompanyName { get; set; }
    public string ContactName { get; set; }
    public string Country { get; set; }
    ...
}
```
You need to execute a single deferred query to return the filtered list of customers.
Which code segment should you use?
Question 11
Which code segment should you use?
You are developing a .NET application that uses the HttpClient type to call an ASP.NET Web API application. The API call returns a list of customers in JSON format and logs the results.
The URI for the API call is in a variable named address.
You need to make the API call without blocking.
Which code segment should you use?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: C
Explanation/Reference:
A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Explanation/Reference:
Example:
// Create an HttpClient instance
11: HttpClient client = new HttpClient();
12:
13: // Send a request asynchronously continue when complete
14: client.GetAsync(_address).ContinueWith(
15: (requestTask) =>
16: {
17: // Get HTTP response from completed task.
18: HttpResponseMessage response = requestTask.Result;
19:
20: // Check that response was successful or throw exception
21: response.EnsureSuccessStatusCode();
22:
23: // Read response asynchronously as JObject and write out top facts for each country
24: response.Content.ReadAsAsync<JsonArray>().ContinueWith(
25: (readTask) =>
26: {
27: foreach (var value in readTask.Result)
28: {
29: logger(value.ToString());
30: }
31: }
32: );
33:
34: );

Question 12
Which method of the EntityCommand type should you use?
You are developing an ASP.NET MVC application. The application has a page that updates an image stored in a database. Members of the EntityClient namespace are used to access an ADO.NET Entity Framework data model. Images and associated metadata are stored in a single database table. You need to run a single query that updates an image and associated metadata in the database while returning only the number of affected rows.
Which method of the EntityCommand type should you use?
A. ExecuteNonQuery()
B. ExecuteScalar()
C. ExecuteDbDataReader()
D. ExecuteReader()

Correct Answer: A
Explanation/Reference:
Question 13
Which approach should you use?
You are developing a new ASP.NET MVC application that does not have an existing database. The requirements for the application are not complete, and the SQL data model will likely change. You need to choose an approach to visually manage a data model. Which approach should you use?
A. Physical First
B. Database First
C. Code First
D. Model First

Correct Answer: D
Explanation/Reference:
With the model first workflow, you can design a model in a designer.

Question 14
Which HTTP verb should you use?
You are designing an ASP.NET Web API application. You need to select an HTTP verb to allow blog administrators to modify the text of a comment. Which HTTP verb should you use?
A. GET
B. DELETE
C. POST
D. PUT

Correct Answer: D
Explanation/Reference:

Question 15
What should you do?
You are preparing to develop a set of libraries that uses large data sets. The libraries must be shared across an organization and distributed to several servers. You need to create a remote NuGet feed that exposes the libraries for developer use. What should you do? (Each answer presents part of the solution. Choose all that apply.)
A. Add packages to the Packages folder.
B. Create a new Empty Web Application in Visual Studio.
C. Configure the Packages folder located in the appSettings section of the web application’s Web.config.
D. Install the NuGet.DataFeed Package.
E. Install the NuGet.Server Package.
F. Create a new Empty Web Site in Visual Studio.

Correct Answer: ABCE
Explanation/Reference:
Creating Remote Feeds
You can host a remote (or internal) feed on a server that runs IIS.
Step 1 (B): Create a new Empty Web Application in Visual Studio
Step 2 (E): Install the NuGet.Server Package
Step 3 (C): Configure the Packages folder
Step 4 (A): Add Packages to the Packages folder
Step 5: Deploy and run your brand new Package Feed!
Reference: Hosting Your Own NuGet Feeds

Question 16
How many upgrade domains should you use?
You are developing a Microsoft Azure web application. The application will be deployed to 10 web role instances. A minimum of 8 running instances is needed to meet scaling requirements. You need to configure the application so that upgrades are performed as quickly as possible, but do not violate scaling requirements. How many upgrade domains should you use?
A. 1
B. 2
C. 5
D. 10

Correct Answer: C
Explanation/Reference:

Question 17
Which CommandBehavior type should you use?
You are developing an ASP.NET MVC application that displays a report. The report includes large images that are stored in a database. Members of the EntityClient namespace are used to access the database through the ADO.NET Entity Framework data model. You need to prevent memory exceptions while generating a report using the EntityDataReader type.

http://www.aoowe.com
Which CommandBehavior type should you use?
A. FastForwardReadOnly
B. SequentialAccess
C. SingleResult
D. SingleRow

Correct Answer: B
Explanation/Reference:
SequentialAccess
Provides a way for the DataReader to handle rows that contain columns with large binary values. Rather than loading the entire row, SequentialAccess enables the DataReader to load data as a stream.

Question 18
Which method of the EntityCommand type should you use?
You are developing an ASP.NET MVC application. The application has a page that searches for and displays an image stored in a database. Members of the EntityClient namespace are used to access an ADO.NET Entity Framework data model. Images and associated metadata are stored in a database table.
You need to run a query that returns only the image while minimizing the amount of data that is transmitted.
Which method of the EntityCommand type should you use?
A. ExecuteScalar
B. ExecuteDbDataReader
C. ExecuteReader
D. ExecuteNonQuery

Correct Answer: A
Explanation/Reference:
ExecuteScalar
Executes the command, and returns the first column of the first row in the result set. Additional columns or rows are ignored.

Question 19
Which code segment should you use?
You are developing an order processing application that uses the ADO.NET Entity Framework against a SQL Server database. Lazy loading has been disabled. The application displays orders and their associated order details. Order details are filtered based on the category of the product in each order.
The Order class is shown below.
```csharp
public partial class Order
{
    ...
    public int OrderID { get; set; }
    ...
    public virtual ICollection<OrderDetail> OrderDetails { get; set; }
}
```
The OrderDetail class is shown below.
```csharp
public partial class OrderDetail
{
    [Key, Column(Order = 1)]
    public int OrderID { get; set; }
    [Key, Column(Order = 2)]
    public int ProductID { get; set; }
    ...
    public virtual Order Order { get; set; }
    public virtual Product Product { get; set; }
}
```
The Product class is shown below.
```csharp
public partial class Product
{
    ...
    public int ProductID { get; set; }
    ...
    public Nullable<int> CategoryID { get; set; }
    ...
    public virtual Category Category { get; set; }
}
```
The Category class is shown below.
```csharp
public partial class Category
{
    ...
    public int CategoryID { get; set; }
    public string CategoryName { get; set; }
    ...
    public virtual ICollection<Product> Products { get; set; }
}
```
You need to return orders with their filtered list of order details included in a single round trip to the database. Which code segment should you use?
Question 20
Which message pattern should you choose?
You are developing a WCF service that compares several data sources. The service takes a long time to complete.
The service must meet the following requirements:
The client must be able to continue processing while the service is running.
The service must initiate communication with the client application when processing is complete.
You need to choose a message pattern to meet the requirements.
Which message pattern should you choose?
A. One Way
B. Streaming
C. Duplex
D. Request/Reply
Correct Answer: C
Explanation/Reference:

Question 21
Which instance mode should you use?
You are developing a WCF service.
A new service instance must be created for each client session.
You need to choose an instancing mode.
Which instance mode should you use?
A. PerCall
B. Single
C. Multiple
D. PerSession
E. PerRequest
Correct Answer: D
Explanation/Reference:

Question 22
Which instancing mode should you use?
You are developing a WCF service.
A new service instance must be created for each client request.
You need to choose an instancing mode.
Which instancing mode should you use?
A. Single
B. PerRequest
C. PerCall
D. Multiple
E. PerSession
Correct Answer: C
Explanation/Reference:

Question 23
Which HTTP verb should you use?
You are designing an ASP.NET Web API application.
You need to select an HTTP verb to allow blog administrators to remove a comment. Which HTTP verb should you use?
A. PUT  
B. DELETE  
C. POST  
D. GET  

Correct Answer: B  
Explanation/Reference:

**Question 24**
Which code segment should you use?  
You are developing an ASP.NET MVC application. The application is an order processing system that uses the ADO.NET Entity Framework against a SQL Server database. It has a controller that loads a page that displays all orders along with customer information. Lazy loading has been disabled. The Order class is shown below.

```csharp
public partial class Order
{
    ...
    public string CustomerID { get; set; }
    ...
    public virtual Customer Customer { get; set; }
}
```

You need to return the orders and customer information in a single round trip to the database. Which code segment should you use?
A. Option A  
B. Option B  
C. Option C  
D. Option D

Correct Answer: A  
Explanation/Reference:

**Question 25**
You are developing an ASP.NET MVC application that reads and writes data from a SQL Server database. You need to maintain data integrity in all situations that use transactions.  
A. ReadUncommitted  
B. Repeatable  
C. Serializable  
D. ReadCommitted

Correct Answer: C  
Explanation/Reference:

**Question 26**
Which tool should you use?  
You are developing an ASP.NET MVC application. Deployment administrators do not have access to Visual Studio 2102, but will have the elevated permissions required to deploy the application to the servers. You need to select a deployment tool for use by the deployment administrators. Which tool should you use?  
A. Publish Web Site Tool
B. Web Deployment Package
C. One-Click Publish
D. Deployment Package Editor

Correct Answer: B
Explanation/Reference:

**Question 27**
How should you build the expression?
You are developing an application in Visual Studio 2012 to display student information. The application contains the following Entity Framework model.

![Entity Framework Model](image)

The application contains a WCF data service named DirectoryService.svc.
You need to create a query expression to display all of the grades for students whose first name is "John" How should you build the expression?

Correct Answer: A
Explanation/Reference:

**Question 28**
Which isolation level should you use?
You are developing an ASP.NET MVC application that reads and writes data from a SQL Server database. You need to prevent the application from reading data that is locked by other transactions. You also need to prevent exclusive range locks. Which isolation level should you use?
A. ReadCommitted
B. Serializable
C. Repeatable
D. ReadUncommitted

Correct Answer: A
Explanation/Reference:

**Question 29**
What should you do?
You are developing a library to support multiple ASP.NET MVC web applications on a shared server. The library provides implementations of security algorithms. If a problem with any of the security algorithms is discovered, a new version of the library must be created and deployed. Application downtime during the update must be minimized. You need to ensure that the new version of the library will be used by all applications as soon as possible. What should you do?
A. Build the web applications and include the security assembly as an embedded resource. When an update is needed, copy the new assembly to the bin directory for the application.
B. Sign all assemblies in each application with the same key used to sign the security assembly. When an update is needed, create a new key pair and re-sign all assemblies.
C. Build the security assembly as a netmodule in a shared location. Use the assembly linker to merge the netmodule into the assemblies for the application. When an update is needed, update the netmodule in the shared location.
D. Install the security assembly in the Global Assembly Cache (GAC). When an update is needed, update the assembly in the GAC.

Correct Answer: D
Explanation/Reference:

**Question 30**
What should you do?
You develop an ASP.NET MVC application that is secured by using SSL. You are ready to deploy the application to production. The deployment package must include the installation of the SSL certificate. You need to configure the deployment package to meet the requirement. What should you do?
A. Create a web publish pipeline target file with a custom web deploy target.
B. In the Package/Publish settings of the project, select the All Files in this project option.
C. Extend the CopyAllFilesToSingleFolder target in the project file.
D. In the Build Events settings of the project, configure a pre-build event to include the SSL certificate.

Correct Answer: A
Explanation/Reference:

Question 31
Which tool should you use?
You are developing an ASP.NET MVC application.
Applications can be deployed to remote servers only by administrators who have elevated privileges. The administrators do not have access to Visual Studio 2012.
You need to select a deployment tool to deploy the application to remote servers for testing.
Which tool should you use?
A. Copy Web Site Tool
B. One-Click Publish
C. Publish Web Site Tool
D. Web Deployment Package

Correct Answer: D
Explanation/Reference:

Question 32
What should you do?
You are preparing to develop a set of libraries for a company.
The libraries must be shared across the company.
You need to create a remote NuGet feed that exposes the libraries.
What should you do? (Each answer presents part of the solution. Choose all that apply.)
A. Install the NuGet.Feeds Package.
B. Install the NuGet.Server Package.
C. Configure the Packages folder located in the system.webserver section of the web application’s Web.config.
D. Create a new Empty Web Site in Visual Studio 2012.
E. Configure the Packages folder located in the appSettings section of the web application’s Web.config.
F. Add packages to the Packages folder.

Correct Answer: BEFG
Explanation/Reference:

Question 33
Which query expression should you use?
You need to create an OData query expression to return the ten books with the largest number of sales.

Which query expression should you use?
A. /books?$orderby=Sales desc&$count=10
B. /search?$orderby=Sales desc&$count=10
C. /books?$orderby=Sales desc&$top=10
D. /search?$orderby=Sales desc&$top=10

Which query expression should you use?
A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: C
Explanation/Reference:
Order by desc(ending) to get the posts with the largest number of sales at the top. Specify to display the top 10 posts.

Question 34
Which code segments should you include in Target 1, Target 2 and Target 3 to complete the code?
An XML file must be produced by the SaveFeaturedBooks() method of the Book class. The schema of the resulting XML file must be identical to the FeaturedBooks.xml file.
You need to write the code to produce the file.
You have the following code:
Which code segments should you include in Target 1, Target 2 and Target 3 to complete the code? (To answer, drag the appropriate code segments to the correct targets in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content)

Select and Place:

Correct Answer:

Explanation/Reference:

Question 35
Which code segments should you include in Target 1, Target 2, Target 3, Target 4 and Target 5 to complete the code?
You need to update the GetBook() method to retrieve book data by using ADO.NET.
You have the following code:

```csharp
public Book GetBook(int id)
{
    using (var conn = new SqlConnection(connectionString))
    using (var cmd = conn.CreateCommand())
    {
        cmd.CommandText = "Target 1"
        using (var reader = cmd.ExecuteReader())
        {
            if (reader.Read())
            {
                return new Book
                {
                    Id = Target 2,
                    Title = Target 3
                };
            }
        }
    }
}
```

Which code segments should you include in Target 1, Target 2, Target 3, Target 4 and Target 5 to complete the code? (To answer, drag the appropriate code segments to the correct targets in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:
Question 36
Which Entity Data Model tool can you use?
You are building an ADO.NET Entity Framework application.
You need to validate the conceptual schema definition language (CSDL), store schema definition language (SSDL), and mapping specification language (MSL) files.
Which Entity Data Model tool can you use? (Each correct answer presents a complete solution. Choose all that apply.)
A. EDM Generator (EdmGen.exe)
B. ADO.NET Entity Data Model Designer
C. Entity Data Model Wizard
D. Update Model Wizard
Correct Answer: AB
Explanation/Reference:

Question 37
Which HTTP verb should you use?
You are designing an ASP.NET Web API application.
You need to select an HTTP verb to allow blog administrators to moderate a comment.
Which HTTP verb should you use?
A. GET
B. POST
C. DELETE
D. PUT
Correct Answer: D
Explanation/Reference:

Question 38
Which script segment should you use?
You are developing an ASP.NET MVC web application that contains the following HTML:
```html
< table id= "customer" ></table>
```
You also have an ASP.NET Web API application that contains a call for retrieving customers. You must send and retrieve the data in the most compact format possible. You need to update the HTML for the customers table to contain data from the Web API application. Which script segment should you use?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Explanation/Reference:

**Question 39**
Which tool should you use? You are planning to migrate websites from IIS 6 to IIS 7.5. You do not have access to SSH or a VPN. You need to select a deployment tool to securely migrate the websites. Which tool should you use?
A. RoboCopy
B. Web Deploy
C. Microsoft command-line FTP
D. xCopy

Correct Answer: B
Explanation/Reference:

**Question 40**
Which code segment should you use? You need to update the ImportBooks() method to use database transactions. Which code segment should you use?
A. SqlConnection.BeginTransaction(IsolationLevel.RepeatableRead);
B. SqlConnection.BeginTransaction(IsolationLevel.ReadUncommitted);
C. SqlConnection.BeginTransaction(IsolationLevel.Serializable);
D. SqlConnection.BeginTransaction(IsolationLevel.Snapshot);

Correct Answer: C
Explanation/Reference:
Correct Answer: B
Explanation/Reference:
* scenario: The ImportBooks() method must keep a copy of the data that can be accessed while new books are being imported without blocking reads.
    * ReadUncommitted
      A dirty read is possible, meaning that no shared locks are issued and no exclusive locks are honored.

Question 41
Which method should you use?
You need to implement the Get(int) method in the bookstore Web API application to be able to find books by using an ad hoc query. Which method should you use?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: D
Explanation/Reference:

Question 42
Which code segment should you use?
The PurchaseOrders.xml file contains all of the purchase orders for the day. You need to query the XML file for all of the billing addresses. Which code segment should you use?
Question 43

Which filter statement should you use?
You need to create an OData filter expression that returns books that match the following characteristics:
Published after 1/1/2000
Have "Science" as the first word
Which filter statement should you use?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: D
Explanation/Reference:

* gt
Greater than
Example:
filter= Entry_No gt 610
Query on GLEntry service. Returns entry numbers 611 and higher.
* startswith
filter=startswith(Name, 'S')
Query on Customer service. Returns all customers names beginning with "S".

Question 44
What should you do?
You are preparing to write the data access code for the children’s book area of the web site.
You need to review the requirements and identify the appropriate data access technology.
What should you do?
A. Use ADO.NET Entity Framework.
B. Use a Web Service.
C. Use the WCF Data Services.
D. Use LINQ to SQL.
Correct Answer: A
Explanation/Reference:

Question 45
Which data access technology should you implement?
You need to choose the appropriate data access strategy for the college textbook area of the web application.
Which data access technology should you implement?
A. ADO.NET
B. Entity Data Model (EDM)
C. WCF Data Services
D. LINQ to SQL
Correct Answer: A
Explanation/Reference:
* Scenario: The college textbook area of the web application must get data from a daily updated CSV file.
* ADO.NET reads the CSV file in a very similar way as table in database.

Question 46
Which code segment should you use?
You need to configure the server to self-host the bookstore’s Web API application.
Which code segment should you use?
A. Option A
B. Option B
C. Option C
D. Option D
Correct Answer: C
Explanation/Reference:
MapHttpRoute Method
Maps the specified route template.
Use the option with "api/..."

Question 47
Which type should you use to retrieve the data?
You need to return the list of the top 100 books for the GetTopBooks() method.
Which type should you use to retrieve the data?
A. SqlDataReader
Question 48
Which data access technology should you choose?
You need to choose the appropriate data access technology for the cookbook area of the web application.
Which data access technology should you choose?
A. WCF Data Services
B. LINQ to SQL
C. Entity Framework
D. ADO.NET
Correct Answer: A
Explanation/Reference:
* Scenario: The cookbook functionality is contained within a client-side application that must connect to the server using HTTP and requires access to the data using JavaScript.
  * WCF Data Services (formerly known as "ADO.NET Data Services") is a component of the .NET Framework that enables you to create services that use the Open Data Protocol (OData) to expose and consume data over the Web or intranet by using the semantics of representational state transfer (REST). OData exposes data as resources that are addressable by URLs. Data is accessed and changed by using standard HTTP verbs of GET, PUT, POST, and DELETE.
  * WCF Data Services uses the OData protocol for addressing and updating resources. In this way, you can access these services from any client that supports OData. OData enables you to request and write data to resources by using well-known transfer formats: Atom, a set of standards for exchanging and updating data as XML, and JavaScript Object Notation (JSON), a text-based data exchange format used extensively in AJAX applications.

Question 49
Which code segment should you use?
You need to update the CreateMonthlyTotalsReports() method to use database transactions.
Which code segment should you use?
A. SqlConnection.BeginTransaction(IsolationLevel.ReadCommitted);
B. SqlConnection.BeginTransaction(IsolationLevel.ReadUncommitted);
C. SqlConnection.BeginTransaction(IsolationLevel.Chaos);
D. SqlConnection.BeginTransaction(IsolationLevel.Serializable);
Correct Answer: D
Explanation/Reference:
  * Scenario: The Create Monthly Totals Report() method must lock the data and prevent others from updating or inserting new rows until complete.
  * Serializable:
    A range lock is placed on the DataSet, preventing other users from updating or inserting rows into the dataset until the transaction is complete.

Question 50
Which code segment should you use?
The PurchaseOrders.xml file contains all of the purchase orders for the day. You need to query the XML file for all of the shipping addresses.
Which code segment should you use?
Which data access technology should you choose?
You need to choose the appropriate data access technology for the children’s book area of the web application.

Which data access technology should you choose?
A. Web Service
B. LINQ to SQL
C. ADO.NET Entity Framework
D. WCF Data Services

Correct Answer: C
Explanation/Reference:

Question 51
Which data access technology should you choose?
You need to choose the appropriate data access technology for the children’s book area of the web application.
Which data access technology should you choose?
A. Web Service
B. LINQ to SQL
C. ADO.NET Entity Framework
D. WCF Data Services

Correct Answer: C
Explanation/Reference:

Question 52
What should you do?
The UploadOrder() method in the UploadCallbackService service is not implementing the callback behavior defined in the IUploadCallbackService interface.
You need to modify the class to implement the required callback behavior.
What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segments may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:
Question 53
Which code segment should you use?
You need to modify the ExecuteCommandProcedure() method to meet the technical requirements.
Which code segment should you use?
Select and Place:

Correct Answer:
Question 54
What should you do?
The GetExternalOrders() method must use members of the EntityClient namespace to query the database for all records in the InboundQueue entity. You need to modify the GetExternalOrders() method to return the correct data.
What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

Correct Answer:
Question 55
What should you do?
The GetQueueItems() action in the InboundQueueController controller is not populating the view with data. The action must populate the view with data by calling the GetExternalOrders() method in the ExternalQueueService service using the ChannelFactory class.
You need to modify the action to populate the view with data.
What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:
Question 56
What should you do?
You need to complete the GetProcessedOrders() action in the ProcessedOrderController controller to meet the requirements.
What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

Correct Answer:
Question 57
What should you do?
You need to create the ShippingContext class in the ShippingAddress.es file to meet the requirements. What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

Correct Answer:
Question 58
How should you build the method?
The GetVendorPolicy() private method in the ProcessedOrderController controller is returning a CacheItemPolicy object with default values. The returned policy must expire if the external file located at C:\TriggersVendorTrigger.txt has been modified or the timeout outlined in the technical requirements is reached.
You need to return the policy.

How should you build the method? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

Select and Place:

Correct Answer:

Explanation/Reference:
Question 59
What should you do?
You add a class named ShippingInfo.
You need to modify the IShippingService interface and the ShippingInfo class to meet the technical requirements.
What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

Correct Answer:

Explanation/Reference:

Question 60
Which code segments can you insert at line EQ45 to achieve this goal?
The DeleteExternalOrder() method in the ExternalQueueService service is not throwing a FaultException exception as defined by the FaultContractAttribute attribute in the IExternalQueueService.cs file.
You need to throw the FaultException exception.
Which code segments can you insert at line EQ45 to achieve this goal? (Each correct answer presents a complete solution. Chose all that apply)
Question 61
Which code segment should you replace line EQ64?
The GetExternalOrder() method in the ExternalQueueService service is throwing a runtime error. The method must query the database for a record that matches the orderNum parameter passed to the method.
You need to modify the queryString string to retrieve the record.
Which code segment should you replace line EQ64?
A. Option A
B. Option B
C. Option C
D. Option D
Correct Answer: C
Explanation/Reference:

Question 62
Which command should you use?
You need to regenerate the service proxies to include task-based asynchronous method signatures.
Which command should you use?
Correct Answer: B
Explanation/Reference:

Question 63
Which code segment can you insert at line EQ45 to achieve this goal?
The DeleteExternalOrder() method in the ExternalQueueService service is not throwing a FaultException exception as defined by the FaultContractAttribute attribute in the IExternalQueueService.cs file.
You need to throw the FaultException exception.
Which code segment can you insert at line EQ45 to achieve this goal? (Each correct answer presents a complete solution. Chose all that apply.)
A. Option A
B. Option B
C. Option C
D. Option D
Correct Answer: BC
Explanation/Reference:
Question 64
Which code segment can you use?
The GetVendors() action in the ProcessedOrderController controller is querying the database each time it is run. The GetVendors() action must query the database only if the cache is null.
You need to add code to the action at line PC33 to cache the data.
Which code segment can you use? (Each correct answer presents a complete solution. Choose all that apply.)
A. cache.Set(new CacheItem("vendorKey", vendors), GetVendorPolicy());
B. cache.Add("vendors", vendors, new CacheItemPolicy());
C. cache.Add(new CacheItem("vendorKey", vendors), GetVendorPolicy());
D. cache.AddOrGetExisting("vendorKey", context, new CacheItemPolicy());
Correct Answer: AC
Explanation/Reference:

Question 65
What should you do?
The QueueDetail entity type must inherit from the InboundQueue entity type in the ExternalQueue service project using table-per-type inheritance.
You need to modify the entities in the designer.
What should you do? (Each correct answer presents part of the solution. Choose all that apply.)
A. Remove the OrderNum property in InboundQueue.
B. Remove the OrderNum property in QueueDetail.
C. Set the QueueDetail BaseType to InboundQueue.
D. Remove the association between the entities.
E. Right-click the entities and validate the table mapping.
F. Set the InboundQueue BaseType to QueueDetail.
Correct Answer: BCDE
Explanation/Reference:

Question 66
Which code segment should you replace line EQ64?
The GetExternalOrder() method in the ExternalQueueService service is throwing a runtime error. The method must query the database for a record that matches the orderNum parameter passed to the method.
You need to modify the queryString string to retrieve the record.
With which code segment should you replace line EQ64?
A. Option A
B. Option B
C. Option C
D. Option D
Correct Answer: A
Explanation/Reference:

**Question 67**
Which code segment should you use?
You need to modify the ExecuteCommandProcedure() method to meet the technical requirements.
Which code segment should you use?
A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Explanation/Reference:

**Question 68**
Which configuration setting should you add to the web.config?
The service has been deployed to Windows Azure.
Trey Research has provided version 1.3.0.0 of the assembly to support a change in the serialization format. The service must remain available during the transition to the new serialization format.
You need to ensure that the service is using the new assembly.
Which configuration setting should you add to the web.config? (To answer, drag the appropriate configuration elements to the correct location or locations in the answer area. Each configuration element may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:

```xml
<codeBase version="1.3.0.0" href="Trey.Serialization.dll" />
<bindingRedirect oldVersion="1.2.5.0" newVersion="1.3.0.0" />
<bindingRedirect oldVersion="1.2.0.0" newVersion="1.3.0.0" />
<runtime />
<location />
</configuration>
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
<dependentAssembly>
<assemblyIdentity name="Trey.Serialization" />
</dependentAssembly>
</assemblyBinding>
</system.config>
```

Correct Answer:
Question 69
What should you do?
You need to parse flight information from Blue Yonder Airlines. The content of the XML file is shown below.

```xml
<?xml version="1.0" encoding="utf-8"?>
<AirlineFeed>
  <Flight xmlns="urn:CFI" name="AS51">
    <Seats>123</Seats>
    <Arrival>5/2/2011 12:01:12</Arrival>
  </Flight>
  <Flight name="UN24">
    <Seats>123</Seats>
    <Arrival>5/1/2012 10:17:57 PM 02:00</Arrival>
  </Flight>
  <FlightManifest>...
  </FlightManifest>
</AirlineFeed>
```

Some airlines do not specify the timezone of the arrival time. If the timezone is not specified, then it should be interpreted per the business requirements.

You need to implement the LoadFlights() and Parse() methods of the BlueYonderLoader class.

What should you do? (To answer, drag the appropriate code segments to the correct location in the answer area. Each segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

Select and place:
var flights = feed.Elements(
    feed.Root.GetNamespace("urn:cfi") + "Flight");

var flights = feed.Descendants().Where(x =>
    x.NodeType == XmlNodeType.XmlDeclaration && (string)x ==
    "Flight");

var flights = feed.Descendants("urn:cfi:Flight")
    .Concat(feed.Descendants("Flight"));

fi.Arrival = DateTimeOffset.Parse(arrivalRaw,
    null, System.Globalization.DateTimeStyles.AssumeUniversal);

fi.Arrival = DateTimeOffset.Parse(arrivalRaw,
    null, System.Globalization.DateTimeStyles.AdjustToUniversal);

fi.Arrival = XmlConvert.ToDateTimeOffset(arrivalRaw,
    new[] { "Local", "Universal" });

public IEnumerable<FileInfo> LoadFlights(XDocument feed)
{
    return flights.Select(x => Parse(x));
}

private FileInfo Parse(Element FlightElement)
{
    var fi = new FileInfo();

    Correct Answer:
Question 70
What should you do?

Historical flight information data will be stored in Windows Azure Table Storage using the FlightInfo class as the table entity. There are millions of entries in the table. Queries for historical flight information specify a set of airlines to search and whether the query should return only late flights. Results should be ordered by flight name.

You need to specify which properties of the FlightInfo class should be used at the partition and row keys to ensure that query results are returned as quickly as possible.

What should you do? (To answer, drag the appropriate properties to the correct location or locations in the answer area. Each property may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

Select and Place:

Correct Answer:

Explanation/Reference:
**Question 71**

What should you do?

Flight information data provided by Margie’s Travel is updated both locally and remotely. When the data is synced, all changes need to be merged together without causing any data loss or corruption.

You need to implement the `Sync()` method in the `MargiesTravelSync.es` file.

What should you do? (To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

Select and Place:

Correct Answer:

![Code segments](https://msdn.microsoft.com/en-us/library/ms135424.aspx)

**Explanation/Reference:**

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**Question 72**

What should you do?

You need to deploy the application to the Windows Azure production environment to meet the business requirements.

What should you do? (To answer, select the appropriate button in the answer area.)

Hot Area:

![Deployment and Instances](http://www.aoowe.com)
Question 73
Which code segment should you use as the body of the StreamHistoricalFlights() method in the HistoricalDataLoader.es file?
Transformed historical flight information provided by the RemoteDataStream() method must be written to the response stream as a series of XML elements named Flight within a root element named Flights. Each Flight element has a child element named FlightName that contains the flight name that starts with the two-letter airline prefix.
You need to implement the StreamHistoricalFlights() method so that it minimizes the amount of memory allocated.
Which code segment should you use as the body of the StreamHistoricalFlights() method in the HistoricalDataLoader.es file?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: D
Explanation/Reference:
and

Question 74
Which code segment should you replace the body of the SaveChanges() method in the FlightInfoContext.es file?
Errors occasionally occur when saving data using the FlightInfoContext ADO.NET Entity Framework context. Updates to the data are being lost when an error occurs.
You need to ensure that data is still saved when an error occurs by retrying the operation. No more than five retries should be performed.
With which code segment should you replace the body of the SaveChanges() method in the FlightInfoContext.es file?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: C
Explanation/Reference:
Explanation Reference:
EntitySqlException: Represents errors that occur when parsing Entity SQL command text. This exception is thrown when syntactic or semantic rules are violated. SqlException: The exception that is thrown when SQL Server returns a warning or error. This class cannot be inherited.
EntityCommandExecutionException: Represents errors that occur when the underlying storage provider could not execute the specified command. This exception usually wraps a provider-specific exception.

Question 75
What should you do?
You need to configure the Windows Azure service definition to enable Consolidated Messenger to upload files.
What should you do? (To answer, drag the appropriate configuration items to the correct location or locations. Each configuration item may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)
Select and Place:
Correct Answer:

Explanation/Reference:

**Question 76**
Which code segment should you use?
You are adding a new REST service endpoint to the FlightDataController controller that returns the total number of seats for each airline.
You need to write a LINQ to Entities query to extract the required data.
Which code segment should you use?
Question 77
What should you use?
You need to load flight information provided by Consolidated Messenger.
What should you use?
A. Office Open XML
B. COM interop
C. OleDbConnection and OleDbDataReader
D. EntityConnection and EntityDataReader
Correct Answer: C
Explanation/Reference:

Question 78
What should you do?
Historical flight information data will be stored in Windows Azure Table Storage using the FlightInfo class as the table entity. There are millions of entries in the table. Queries for historical flight information specify a set of airlines to search and whether the query should return only late flights. Results should be ordered by flight name.
You need to specify which properties of the FlightInfo class should be used at the partition and row keys to ensure that query results are returned as quickly as possible.
What should you do? (Each correct answer presents part of the solution. Choose all that apply.)
A. Use the WasLate property as the row key.
B. Use the Airline property as the row key.
C. Use the WasLate property as the partition key
D. Use the Arrival property as the row key.
E. Use the Airline property as the partition key.
F. Use the Flight property as the row key.
Correct Answer: BF
Explanation/Reference:

Question 79
Which should you use?
You need to load flight information provided by Consolidated Messenger.
Which should you use?
A. SQL Server Data Transformation Services (DTS)
B. EntityTransaction and EntityCommand
Question 80
Which code segment should you use?
You are adding a new REST service endpoint to the FlightDataController controller. It returns flights from the consolidated data sources only for flights that are late. 
You need to write a LINQ to Entities query to extract the required data. 
Which code segment should you use?

A. Option A
B. Option B
C. Option C
D. Option D
Correct Answer: D
Explanation/Reference:
D is right because you send result as REST so if you use "AsQueryable" the result is deferred to the next enumeration of your result.
D is not optimized but will works.
A will break at runtime.
Credits to Rem

Question 81
What should you do?
Data provided by Consolidated Messenger is cached in the HttpContext.Cache object.
You need to ensure that the cache is correctly updated when new data arrives.
What should you do?
A. Ensure that the EffectivePrivateBytesLimit value is greater than the size of the database file.
B. Change the sliding expiration of the cache item to 12 hours.
C. Use the SqlCacheDependency type configured with a connection string to the database file.
D. Use the CacheDependency type configured to monitor the SFTP target folder.
Correct Answer: D
Explanation/Reference:

Question 82
Which data access technology should you recommend?
You need to recommend a data access technology to the contractor to retrieve data from the new data source. 
Which data access technology should you recommend?
A. LINQ to XML
B. ADO.NET Entity Framework
C. ADO.NET DataSets
D. WCF Data Services
Question 83
Which code segment should you use as the body of the SaveChanges() method in the FlightInfoContext.es file?
Errors occasionally occur when saving data using the FlightInfoContext ADO.NET Entity Framework context. Updates to the data are being lost when an error occurs.
You need to ensure that data is still saved when an error occurs by retrying the operation. No more than five retries should be performed.
Which code segment should you use as the body of the SaveChanges() method in the FlightInfoContext.es file?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Explanation/Reference: