Developing Microsoft SharePoint Server 2013 Core Solutions

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File Version: 1.0

- **Vendor:** Microsoft

- **Exam Code:** 70-488

- **Exam Name:** Developing Microsoft SharePoint Server 2013 Core Solutions

- **Version:** 1.0

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2. 1.2. Create content types
3. 1.3. Manage content type behaviors
4. 1.4. Implement site provisioning
5. 2.1. Implement user authentication
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Testlet 1

Consolidated Messenger

Background

Busimess Scenario

You are the lead architect, developer, and web administrator of SharePoint 2013 for your company, Consolidated Messenger. Consolidated Messenger is a national company with hundreds of franchises.

Consolidated Messenger focuses on bicycle- based courier services in metropolitan areas.

Consolidated Messenger sells franchises to franchisees. Franchisees have three user types:

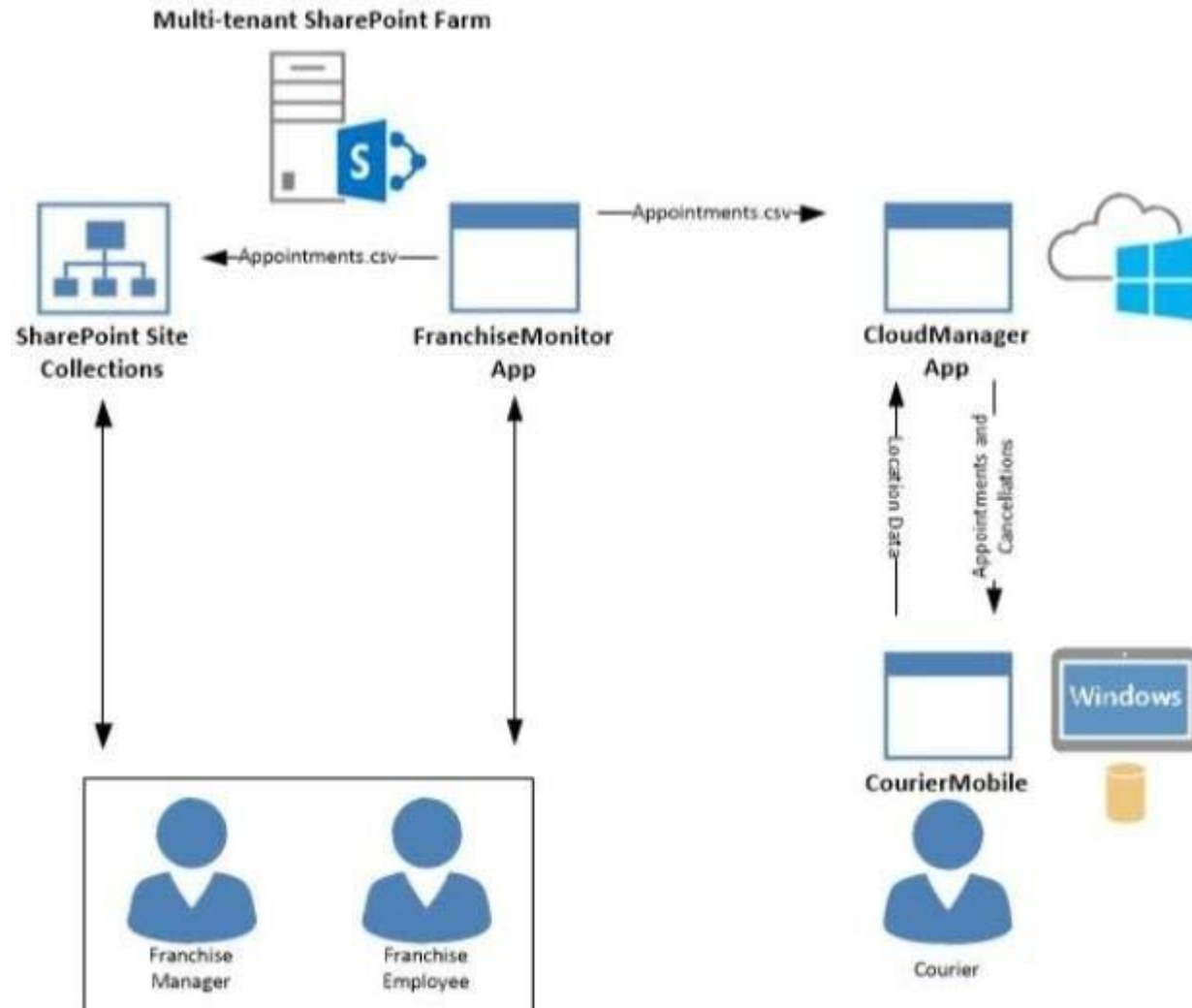| User	Role
Franchise Manager	Responsive for managing the francise
Franchise Employee	Responsive for managing accounts and setting pick-up and drop-off locations for couriers
Courier	Responsive for picking-up and dropping-off packages

Technical Scenario

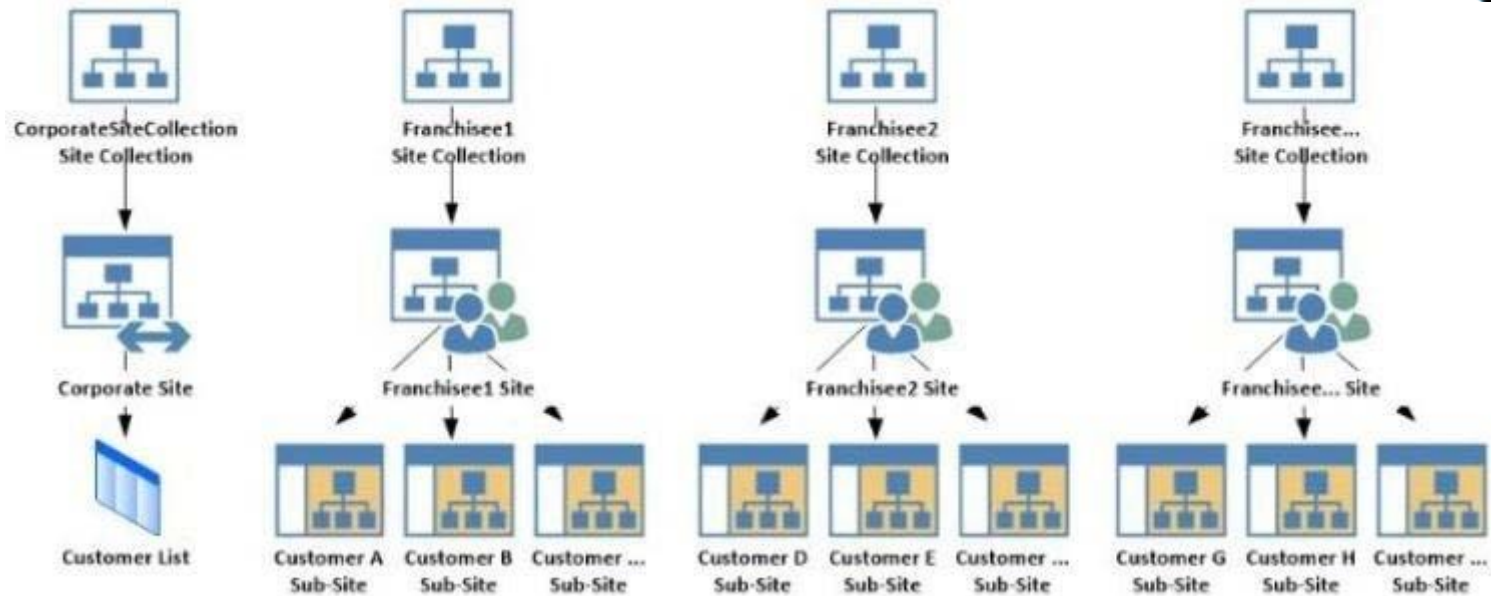When a franchisee purchases a franchise, they are provided with:
- Access to Consolidated Messenger's SharePoint 2013 multi-tenant farm located at https://sp.consolidatedmessenger.com
- Access to a Customers list in the Corporate site collection, named CorporateSiteCollection, which includes a list of all Customers across all franchisees
- A single site collection for each franchisee, named FranchiseeSiteCollection
- An unlimited number of customer subsites for each franchisee
- Consolidated Messenger has funded the creation of three apps.

App Name	Purpose
FranchiseMonitor	Used by franchisees from their franchise locations to monitor the progress of the bicycle couriers
CourierMobile	Used by bicycle couriers to perform their day-to-day function of receiving and delivering packages
CloudManager	Used to perform management of bicycle couriers, their routes, and their schedules

Solution Architecture

Multi-tenant SharePoint Farm

SharePoint Site Collections

FranchiseMonitor App

Appointments.csv

Appointments.csv

CloudManager App

Location Data

Appointments and Cancellations

CourierMobile

Windows

Franchise Manager

Franchise Employee

Courier

Site Collection Structure

Diagram showing CorporateSiteCollection Site Collection → Corporate Site → Customer List; Franchisee1 Site Collection → Franchisee1 Site → Customer A Sub-Site, Customer B Sub-Site, Customer ... Sub-Site; Franchisee2 Site Collection → Franchisee2 Site → Customer D Sub-Site, Customer E Sub-Site, Customer ... Sub-Site; Franchisee... Site Collection → Franchisee... Site → Customer G Sub-Site, Customer H Sub-Site, Customer ... Sub-Site

SharePoint Farm Design

My Sites are not created for each Franchisee unless they are requested.

Requirements

Business Requirements

User	SharePoint Access
Franchise Manager	• Franchise Managers are site collection administrators for each franchise. • Franchise Managers may only access their site collection settings and not the settings of the web application. • Franchise Managers must be able to add users to a site in a People Picker control based on claims. • Franchise Managers must be able to search for claims by using the type-in control of the claims picker. The claims must be displayed by using a flattened structure.
Franchise Employee	• Franchise employees are customer subsite owners for each franchise. • Franchise employees must be able to read from the Customers list in the CorporateSiteCollection. • Franchise employees must have complete control over the customer subsites that is assigned to the the franchise.
Courier	• No SharePoint access

Technical Requirements

Each Franchise site collection must include a SharePoint document library to store CSV files.

FranchiseMonitor App

Application Design

Franchise employees use Microsoft Excel 2013 to create a list of pick-up and dropoff locations for each bicycle courier for each day.

The spreadsheet is named Appointments.csv.

Business Requirements

The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv to a SharePoint document library in each Franchisee site collection, and send Appointments.csv to the CloudManager app.

Technical Requirements

- The FranchiseMonitor app must display the courier's location on the bicycle courier's microfeed on the SharePoint farm if the courier has remained stationary for more than three minutes.
- The FranchiseMonitor app must be listed on the Site Contents page of the host web.
- The FranchiseMonitor app must use claims-based authentication, once launched, to authenticate the franchisee against an API provided by Margie's Travel.
- The FranchiseMonitor app must be deployed to all site collections by the SharePoint administrator.
- The FranchiseMonitor app must be immediately available to be installed on websites within the tenancy on a website-by-website basis to any tenant contained in the SharePoint farm.
- The FranchiseMonitor app must be able to create lists within SharePoint to store records of the CSV files so that they may be sent to the CloudManager app.

CourierMobile App

Application Design

- Each bicycle courier for each franchise is provided a Microsoft Surface Pro device with LTE. Most bicycle couriers do not return their Microsoft Surface Pro devices back to their franchise locations nightly.
- The CourierMobile app runs on the bicycle courier's Microsoft Surface Pro device.
- Margie's Travel provides an API to enable external developers to authenticate by using OAuth and claims-based authentication. Many couriers are members of Margie's Travel.
- The CourierMobile app receives Microsoft Outlook appointments and Outlook appointment cancellations from the CloudManager app. The appointments include the address of the location for pick-up or drop-off.

Business Requirements

- The CourierMobile app must display a Bing map to display route data when Outlook appointments or appointment cancellations are received.
- The CourierMobile app must capture the location of the Microsoft Surface Pro device on a regular interval. This data must be captured regardless of whether the device has connectivity.
- The CourierMobile app must be able to connect to the SharePoint Customers list and verify whether the account belongs to the franchisee to avoid pickups or deliveries to customers that do not belongs to the franchisee. When the CourierMobile app accesses the Customers list, it must only read its contents with the minimum permissions necessary.

Technical Requirements

- The CourierMobile app must provide the ability to authenticate by using the courier's Microsoft account or the Margie's Travel API .
- The CourierMobile app must include a custom sign-in page that includes branding from Consolidated Messenger and Margie's Travel, based on the authentication provider selected by the user.
- The CourierMobile app must be able to capture more than 30 million data points of location data daily as they occur and upload the location data to the cloud when connected to the Internet.

CloudManager App

Application Design

CloudManager processes two sets of data:
- Updates to the list of appointments received from the FranchiseMonitor app
- Geo-location data received from the CourierMobile app

Business Requirements

The CloudManager app must implement business logic that parses Appointments.csv and geolocation data and sends Appointments or Appointment cancellations to the CourierMobile app.

Technical Requirements

- The CloudManager app must elastically scale to capture courier location data as the number of bicycle couriers increases or decreases.
- The CloudManager app must process bicycle courier location data from a data store capable of storing more than 30 million items.

Solution Code

MyClaimsProvider.cs

```
CP01    [SharePointPermissionAttribute(SecurityAction.LinkDemand, ObjectModel = true)]
CP02    [SharePointPermissionAttribute(SecurityAction.InheritanceDemand, ObjectModel = true)]
CP03
CP04    public class MyClaimsProvider : Microsoft.SharePoint.Administration.Claims.SPClaimProvider
CP05    {
CP06        public abstract string Name;
CP07
CP08        protected abstract void FillSchema(...);
CP09        protected abstract void FillClaimTypes(...);
CP10        protected abstract void FillClaimValueTypes(...);
CP11        protected abstract void FillEntityTypes(...);
CP12
CP13        public abstract bool SupportsResolve;
CP14        protected abstract void FillResolve(...);
CP15        protected abstract void FillResolve(...);
CP16
CP17        public abstract bool SupportsSearch;
CP18        protected abstract void FillSearch(...);
CP19
CP20    }
```

AppManifest.xml for Franchise Monitor app

```
AM01   <?xml version="1.0" encoding="utf-8" ?>
AM02   <App xmlns= "http://schemas.microsoft.com/sharepoint/2012/app/manifest"
AM03     ProductID="{4a07f3bd-803d-45f2-a710-b9e944c3396e}"
AM04     Version="1.0.0.0"
AM05     SharePointMinVersion="15.0.0.0"
AM06     Name="FranchiseMonitor"
AM07   >
AM08     <Properties>
AM09       <Title>FranchiseMonitor App</Title>
AM10       <StartPage>~remoteAppUrl/Home.aspx?{StandardTokens}</StartPage>
AM11     </Properties>
AM12
AM13     <AppPrincipal>
AM14       <RemoteWebApplication ClientId="1ee82b34-7c1b-471b-b27e-ff272accd564" />
AM15     </AppPrincipal>
AM16
AM17     <AppPermissionRequests>
AM18       <AppPermissionRequest Scope="http://sharepoint/content/sitecollection/web/list" Right="Write" />
AM19     </AppPermissionRequests>
AM20   </App>
```

QUESTION 1
Question 1
A franchisee deletes several sites from the franchise's site collection. The franchisee site collection administrator must recover the sites.
You need to instruct the franchisee site collection administrator on how to access the page to recover the sites.

What should the site collection administrator do to get to the appropriate page?

A. Select General Settings for the Web Application in Central Administration and change the second stage Recycle Bin settings to 100 percent.
B. Select General Settings for the Web Application in Central Administration and change the first stage Recycle Bin settings to 0 days.
C. Select the Recycle Bin on the Site Settings page. Choose the appropriate sites and select Restore Selection.
D. Select the Recycle Bin in the Quick Launch page. Choose the appropriate sites and select Restore Selection.

Correct Answer: C
Section: [none]
Explanation

Explanation/Reference:
The sites have been deleted. They need to be restored. A and B are wrong because modifying the Recycle Bin settings after the sites are deleted will have no effect on the deleted sites.

Or use /_layouts/adminrecyclebin.aspx?view=2 (deleted from end user Recycle Bin)

Sam/Anon: Answer A
abc (Germany, 13.06.2014): there was no option recycle bin in site settings page, new options were to use url /_layouts/adminrecyclebin.aspx and recycle bin in site contents page
Duckl (Germany, 27.10.14): had Options recycle bin in Content page or recycle bin in Settings page (Chose Settings-Variant because it's the Admin recycle bin)
KL (Hong Kong, 8.12.14): I choose answer restore from the site collection /_layouts/15/AdminRecycleBin.aspx page

QUESTION 2
Question 2
You need to implement the custom claims provider for the SharePoint farm.

Which code segments should you implement?
(Each correct answer presents part of the solution. Choose all that apply.)

A.
```
public abstract bool SupportsEntityInformation { get; }
protected abstract void FillClaimsForEntity(Uri context, SPClaim entity, List<SPClaim> claims);
```

B.
```
protected abstract void FillSchema(SPProviderSchema schema);
protected abstract void FillClaimTypes(List<string> claimTypes);
protected abstract void FillClaimValueTypes(List<string> claimValueTypes);
protected abstract void FillEntityTypes(List<string> entityTypes);
```

C.
```
public abstract bool SupportsHierarchy { get; }
protected abstract void FillHierarchy(Uri context, string[] entityTypes, string hierarchyNodeID,
    int numberOfLevels, SPProviderHierarchyTree hierarchy);
```

D.
```
public abstract bool SupportsResolve { get; }
protected abstract void FillResolve(Uri context, string[] entityTypes,
    SPClaim resolveInput, List<PickerEntity> resolved);
protected abstract void FillResolve(Uri context, string[] entityTypes,
    string resolveInput, List<PickerEntity> resolved);
```

E.
```
public abstract string Name { get; }
```

F.
```
public abstract bool SupportsSearch { get; }
protected abstract void FillSearch(Uri context, string[] entityTypes,
    string searchPattern, string hierarchyNodeID, int maxCount, SPProviderHierarchyTree searchTree);
```

Correct Answer: BDEF
Section: [none]
Explanation

Explanation/Reference:
SupportsEntityInformation   When implemented in a derived class, determines whether the claims provider supports information about augmenting claims to entities.
FillClaimsForEntity   When implemented in a derived class, augments custom claims into a claims token.
Required for claims augmentation.

FillSchema   When implemented in a derived class, fills the schema of the entity. The schema is used by People Picker control to display the entity data.
FillClaimTypes   When implemented in a derived class, specifies the set of possible claims types that the claims provider supports.
FillClaimValueTypes   When implemented in a derived class, specifies the set of possible claim value type for claim type that the claims provider supports.
FillEntityTypes   When implemented in a derived class, specifies the set of possible entity types that the claims provider is supporting for display in the People Picker control.
To implement name resolution, you need to override this abstract methods
* From scenario: Franchise Managers must be able to add users to a site in a People Picker control based on claims.

SupportsHierarchy   When implemented in a derived class, determines whether the claims provider supports hierarchical display.
FillHierarchy   When implemented in a derived class, provides the People Picker control with the ability to load portions of the tree from the claims provider and specifies the hierarchy for displaying the picker entities.
* From scenario: the claims must be displayed by using the flattened structure.

SupportsResolve   When implemented in a derived class, determines whether the claims provider supports resolve operations.
FillResolve   When implemented in a derived class, resolves claims by using the type-in control of the claims picker.
* From scenario: Franchise Managers must be able to add users to a site in a People Picker control based on claims. Franchise Managers must be able to search for claims by using the type-in control of the claims picker.

Name   When implemented in a derived class, gets the unique name for the claims provider.
You must implement the Name property for all custom claims providers.

SupportsSearch   When implemented in a derived class, determines whether the claims provider supports search operations.
FillSearch   When implemented in a derived class, fills search results in People Picker control window.
* From scenario: Franchise Managers must be able to search for claims by using the type-in control of the claims picker.

Depending on the authentication type you use, SharePoint will access one of three default claims providers:
▪ SPActiveDirectoryClaimProvider. Used by Windows Authentication
▪ SPFormsClaimProvider. Used by FBA
▪ SPTrustedClaimProvider. Used by SAML-based (IP) authentication

http://technet.microsoft.com/en-us/library/microsoft.sharepoint.administration.claims.spclaimprovider_members.aspx
http://sportstoday.us/technology/sharepoint-2013---claims-based-authentication,-federated-identities,-and-oauth-%28part-5%29---sharepoint-trusted-ips----creating-a-custom-claims-provider.aspx

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QUESTION 3
Question 3
You need to create a custom sign-in page to allow the users of the FranchiseMonitor app to authenticate against SharePoint and Margie's Travel API.

What should you do?

A. Create an app for SharePoint. Set the trust level to Sandbox solution.
    Create an application page that writes a cookie named FedAuth.
    Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.
B. Create an app for SharePoint. Set the trust level to Farm solution.
    Create an application page that writes a cookie named FedAuth.
    Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.
C. Create an app for SharePoint. Set the trust level to Farm solution.
    Create an application page that writes a cookie named ASPXAUTH.
    Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.
D. Create an app for SharePoint. Set the trust level to Sandbox solution.
    Create an application page that writes a cookie named ASPXAUTH.
    Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
The ASPXAUTH cookie is used to determine if a user is authenticated.

FedAuth Cookie is what is used with **Claims Authentication**. SharePoint STS will issue the FedAuth Cookie which contains the references to the claims token. Claim tokens are actually stored separately.

From scenario:
The FranchiseMonitor app must be deployed **to all site collections** by the SharePoint administrator.

QUESTION 4
Question 4
You need to add markup at line AM10 to set the minimum app permissions for the FranchiseMonitor app.

Which code segments should you include to complete the code?
(To answer, select the appropriate options from each drop-down list in the answer area.)

Hot Area:

```
<AppPermissionRequest>
  <AppPermissionRequest

    Scope = "                                          ▼ "
            ┌─────────────────────────────────────────────┐
            │ http://sharepoint/content/tenant            │
            │ http://sharepoint/content/sitecollection/   │
            │ http://sharepoint/content/sitecollection/web │
            │ http://sharepoint/content/sitecollection/web/List │
            └─────────────────────────────────────────────┘

    Right = "              ▼ "
            ┌──────────────┐
            │ Read         │
            │ Write        │
            │ Manage       │
            │ FullControl  │
            └──────────────┘
    />
</AppPermissionRequest>
```

Correct Answer:

```
<AppPermissionRequest>
  <AppPermissionRequest

    Scope = "                                          ▼ "
            ┌─────────────────────────────────────────────┐
            │ http://sharepoint/content/tenant            │
            │ http://sharepoint/content/sitecollection/   │
            │ http://sharepoint/content/sitecollection/web │  ← highlighted
            │ http://sharepoint/content/sitecollection/web/List │
            └─────────────────────────────────────────────┘

    Right = "              ▼ "
            ┌──────────────┐
            │ Read         │
            │ Write        │
            │ Manage       │  ← highlighted
            │ FullControl  │
            └──────────────┘
    />
</AppPermissionRequest>
```

Section: [none]
Explanation

Explanation/Reference:

QUESTION 5
Question 5
You need to ensure that the CourierMobile app determines whether the franchisee owns the account.

What should you do?

A. Use OAuth and App only security. Request the Read right from the http://sharepoint/content/sitecollection/web/list scope URI.
B. Use OAuth and App+User security. Request the Read right from the http://sharepoint/content/sitecollection scope URI.
C. Use SPSecurity.RunWithElevatedPrivileges to connect to SharePoint and read from the Accounts list in the site collection.
D. Use the SharePoint user credentials of the bicycle messenger to connect to SharePoint and read from the Accounts list in the site collection.

Correct Answer: A
Section: [none]
Explanation

Explanation/Reference:
Scenario:
▪ Courier - no SharePoint access.
▪ Margie's Travel provides an API to enable external developers to authenticate by using OAuth and claims-based authentication. Many couriers are members of Margie's Travel.

Business Requirements
The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv to a SharePoint document library in each Franchisee site collection, and send Appointments.csv to the CloudManager app.
The FranchiseMonitor app must display the courier's location on the bicycle courier's microfeed on the SharePoint farm if the courier has remained stationary for more than three minutes.
The CloudManager app must implement business logic that parses Appointments.csv and geo-location data and sends Appointments or Appointment cancellations to the CourierMobile app.

The CourierMobile app must be able **to connect to the SharePoint Customers** list and verify whether the account belongs to the franchisee **to avoid pickups or deliveries to customers that do not belongs to the franchisee**. When the CourierMobile app accesses the Customers list, it must only read its contents with the minimum permissions necessary.

All: Answer C
Niki: Answer D
LWilson (US, 29.11.2013): C is wrong because SPSecurity.RunwithElevatedPrivileges only works with server side code that resides on the Sharepoint farm and runs using the account that the web application in IIS is configured for. CourierMobile app clearly doesn't run with that account.
Correct answer A Use Oauth and app only security. Request the read right from the web/list scope uri

QUESTION 6
Question 6
You need to set the appropriate permissions for the franchise employees' customer list and customer subsite access.

What should you do?

A. Add franchise employees to the Members group in the CorporateSiteCollection site collection.
    Break inheritance at the franchisee subsite level.
    Create a custom role definition at the franchisee subsite level.
    Add franchise employees to the custom role.

B. Create a custom role definition in the CorporateSiteCollection site collection with Limited Access to the Customers list.
    Add franchise employees to the custom role at the CorporateSiteCollection site collection.
    Break inheritance at the subsite level.
    Add franchise owners to the Owners group at the subsite level.

C. Create a custom role definition in the CorporateSiteCollection site collection with Limited Access to the Customer list.
    Add franchise employees to the custom role.
    Allow full inheritance of the role definition and permissions at the site level.

D. Add franchise employees to the Visitors group in the CorporateSiteCollection site collection.
    Break inheritance at the franchisee subsite level.
    Create a custom role definition at the subsite level with Full Control permissions.
    Add franchise employees to the custom role.

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
AM: Answer D
Niki: Answer C

QUESTION 7
Question 7
You need to meet the requirements for data storage for the CourierMobile app and the CloudMananger app.

Which technologies should you use?
(Each correct answer presents part of the solution. Choose all that apply.)

A. Windows Azure SQL Database

B. SharePoint content database

C. Secure Store

D. SQL Server Express LocalDB

E. SharePoint list

Correct Answer: AD
Section: [none]
Explanation

Explanation/Reference:
http://technet.microsoft.com/en-us/library/cc262787.aspx#ListLibrary

A: SQL Azure in the cloud.
D: LocalDB is a lightweight version of Express that has the same programmability features, but it runs in user mode and has a fast, zero-configuration installation and a short list of prerequisites.
not E: List and library limits: Items - 30,000,000 per list (supported)

From scenario:
CourierMobile App
The CourierMobile app must be able to capture more than 30 million data points of location data daily as they occur and upload the location data to the cloud when connected to the Internet.

CloudManager App
▪ The CloudManager app must elastically scale to capture courier location data as the number of bicycle couriers increases or decreases.
▪ The CloudManager app must process bicycle courier location data from a data store capable of storing more than 30 million items.

QUESTION 8
Question 8
Some franchisees want to launch the FranchiseMonitor app from a link named Launch Franchise Monitor that is displayed next to the name of the user who is currently logged in.

Other franchisees do not want to have the link present. The link must be contained within the same out-of-the-box control, as shown in the screenshot below:

You need to configure support for the Launch Franchise Monitor link.

Which four actions should you perform in sequence?
(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area

Actions

Add a new user control named SuiteLinkDelegate.

Ensure the the class inherits from the **WebPart** class and overrides the **RenderControl** method.

Add a new code module named SuiteLinkDelegate.

Create a new SharePoint 2013 Empty Project.

Add a reference to the control to the AppManifest file.

Add a reference to the control to an empty elements file.

Ensure the the class inherits from the **UserControl** class and overrides the **RenderControl** method.

Create a new App for SharePoint 2013 project.

Correct Answer:

Actions

Answer Area

Ensure the the class inherits from the **WebPart** class and overrides the **RenderControl** method.

Add a new code module named SuiteLinkDelegate.

Add a reference to the control to the AppManifest file.

Create a new App for SharePoint 2013 project.

Create a new SharePoint 2013 Empty Project.

Add a new user control named SuiteLinkDelegate.

Ensure the the class inherits from the **UserControl** class and overrides the **RenderControl** method.

Add a reference to the control to an empty elements file.

Section: [none]
Explanation

Explanation/Reference:
Empty elements are most often used to define SharePoint project items that lack a project or project item template in Visual Studio. When you add an

empty element to your project, a node named EmptyElement[x] (where [x] is a unique number) is created. EmptyElement[x] contains a single file that is named Elements.xml. Use XML statements to define the desired elements in Elements.xml.

http://www.learningsharepoint.com/2013/02/10/addremove-links-in-top-suitebar-skydrivesitesnewsfeed-in-sharepoint-2013/
http://www.codeproject.com/Articles/569897/UsingplusDelegateplusControlplusinplusSharepoint
1. Add the User control to project.
2. Add a Module to project which will take care of adding the user control to Delegate control. I named it as "DelegateModule". Delete sample.txt file and modify the Elements.xml to resemble something like this.
3. Create a feature and add "DelegateModule" to it.

http://mihirsharepoint.wordpress.com/2012/11/15/create-delegate-control-in-sharepoint/

1. open the visual studio and create an empty project.
2. Add the **control templates** mapped folder, visual webpart, empty element like below image.
3. Add the code to the designer surface of the visual webpart
4. In elements.xml file under the empty element you added, add the following code
5. Save the changes and deploy into the site.

LWilson (US, 29.11.2013):
Correct answer: Create a new Sharepoint 2013 empty project, Add a new user control called suitelinksdelegate, ensure the class inherits from the UserControl class and overrides the render method, add a reference to the control to an empty elements file.
You can read about this more at: http://www.learningsharepoint.com/2013/02/10/addremove-links-in-top-suitebar-skydrivesitesnewsfeed-in-sharepoint-2013/

Antonio (Italy, 13.12.13): You need to configure support for the Launch Franchise Monitor link......
But what would be the translation of the technical requirement
"Other franchisees do not want to have the link present. "
in the questions?

Antonio (Italy, 13.12.13): The (Functional) Context Scope of each Franchise is SiteCollection:
then if a Franchise don't want see this new link, simply not activate the feature (scope:site, of course). Am I right?

Sam/MsExam: Answer

Create a new App for SharePoint 2013 project.

Add a new code module named SuiteLinksDelegate.

Ensure that the class inherits from the **UserControl** class and overrides the Render method.

Add a reference to the control to an empty elements file.

Anon: Answer

Ensure that the class inherits from the **UserControl** class and overrides the Render method.

Add a reference to the control to an empty elements file.

Create a new SharePoint 2013 Empty Project.

Add a new user control named SuiteLinksDelegate.

QUESTION 9
Question 9
You need to create rules in the CourierMobile app based on the ItemType that arrives.

For which ItemTypes should you test?
(Each correct answer presents part of the solution. Choose all that apply.)

A. IPM.Schedule.Meeting.Tent
B. IPM.Note
C. IPM.Schedule.Meeting.Request
D. IPM.Appointment
E. IPM.Schedule.Meeting.Cancelled
F. IPM.Schedule.Meeting.Pos
G. IPM.Schedule.Meeting.Neg

Correct Answer: DE
Section: [none]
Explanation

Explanation/Reference:

From scenario:
The CourierMobile app receives Microsoft Outlook appointments **(D)** and Outlook appointment cancellations **(E)** from the CloudManager app.
The appointments include the address of the location for pick-up or drop-off.

http://msdn.microsoft.com/en-us/library/office/ff861573.aspx

Anon: Answer BG

QUESTION 10
Question 10
You need to ensure that the CloudManager app can write route progress check-ins to the courier's microfeed.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

A. Ensure that SP.RequestExecutor.js can be accessed in a browser window with no errors.
B. Ensure that the CloudManager app has the Manage permission request scoped to the URL for the franchisee's My Site.
C. Ensure that the MySite host is provisioned for each franchisee.
D. Ensure that all cookies are made available between the My Site and the CloudManager app domain.
E. Ensure that the CloudManager app has the Write permission request scoped to the URL for the franchisee's My Site.
F. Ensure that SP.UserProfiles.js can be accessed in a browser window with no errors.

Correct Answer: ABDE
Section: [none]
Explanation

Explanation/Reference:
The Request Executor library enables cross-domain client-side calls, which are required when coding against SharePoint services when pages are hosted outside of SharePoint.

https://msdn.microsoft.com/en-us/library/office/dn735928.aspx

```
$.getScript(scriptbase + 'SP.Runtime.js',
    function () {
       $.getScript(scriptbase + 'SP.js',
          function () { $.getScript(scriptbase + 'SP.RequestExecutor.js', printAllListNamesFromHostWeb); }
       );
    }
);

function printAllListNamesFromHostWeb() {
```

```
    var context = new SP.ClientContext(appweburl);
    var factory = new SP.ProxyWebRequestExecutorFactory(appweburl);
    var context.set_webRequestExecutorFactory(factory);
    var appContextSite = new SP.AppContextSite(context, hostweburl);
    ....
    .....
}
```

From scenario:

Business Requirements
The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv to a SharePoint document library in each Franchisee site collection, and send Appointments.csv to the CloudManager app.
The FranchiseMonitor app must display the courier's location on the bicycle courier's **microfeed** on the SharePoint farm if the courier has remained stationary for more than three minutes.
The CloudManager app must implement business logic that parses Appointments.csv and geo-location data and sends Appointments or Appointment cancellations to the CourierMobile app.

AM: Answer ADEF.

© Sgt.Pepper *70-517*: A3 *Sam*:A3 *Angie1*:A2 *Anon*:A3 *Niki*:A3 *Angie2*:A2 *Alberta*:A2 *Noam*:A3 *Hellen*:A3 *Isaiah*:A3 *MsExam*:A3

QUESTION 11
Question 11
You need to design the FranchiseMonitor app to meet the requirements.

What should you do?
(To answer, select the appropriate option from each drop-down list in the answer area.)

Hot Area:

Create the **CourierManagerApp** app as [▼] .
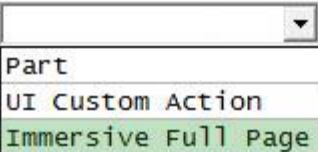
| App for Office 2013 |
| App for SharePoint 2013 |
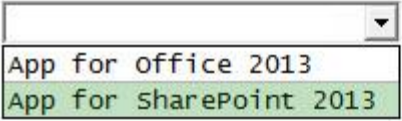
Design the **CourierManagerApp** app UI with a/an [▼] app shape.

| Part |
| UI Custom Action |
| Immersive Full Page |

Correct Answer:

Create the **CourierManagerApp** app as [dropdown ▼].
- App for Office 2013
- **App for SharePoint 2013**

Design the **CourierManagerApp** app UI with a/an [dropdown ▼] app shape.
- Part
- UI Custom Action
- **Immersive Full Page**

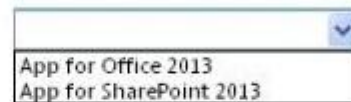**Section: [none]**
Explanation

Explanation/Reference:
Apps can be App Part, Custom Action or Pages (immersive).
- The immersive full-page app is the default entry point for SharePoint apps.
- App Part is a type of Web Part that is represented by the ClientWebPart class. App Part is not replacement for WebPart. An App Part is essentially a wrapper for an IFrame that would host a page of the App. In addition to acting as a Wrapper, like a WebPart, an App part can have custom properties that users can set in a tool part.

http://www.codeproject.com/Articles/690015/SharePoint-2013-Online-App-Development-Part-1
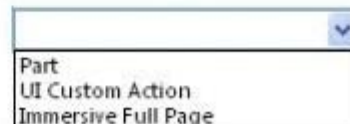
Answer Area

Create a CloudManagerApp app as an [dropdown ▼]
- App for Office 2013
- App for SharePoint 2013

Design the CloudManagerApp app UI with a/an [dropdown ▼] app shape.
- Part
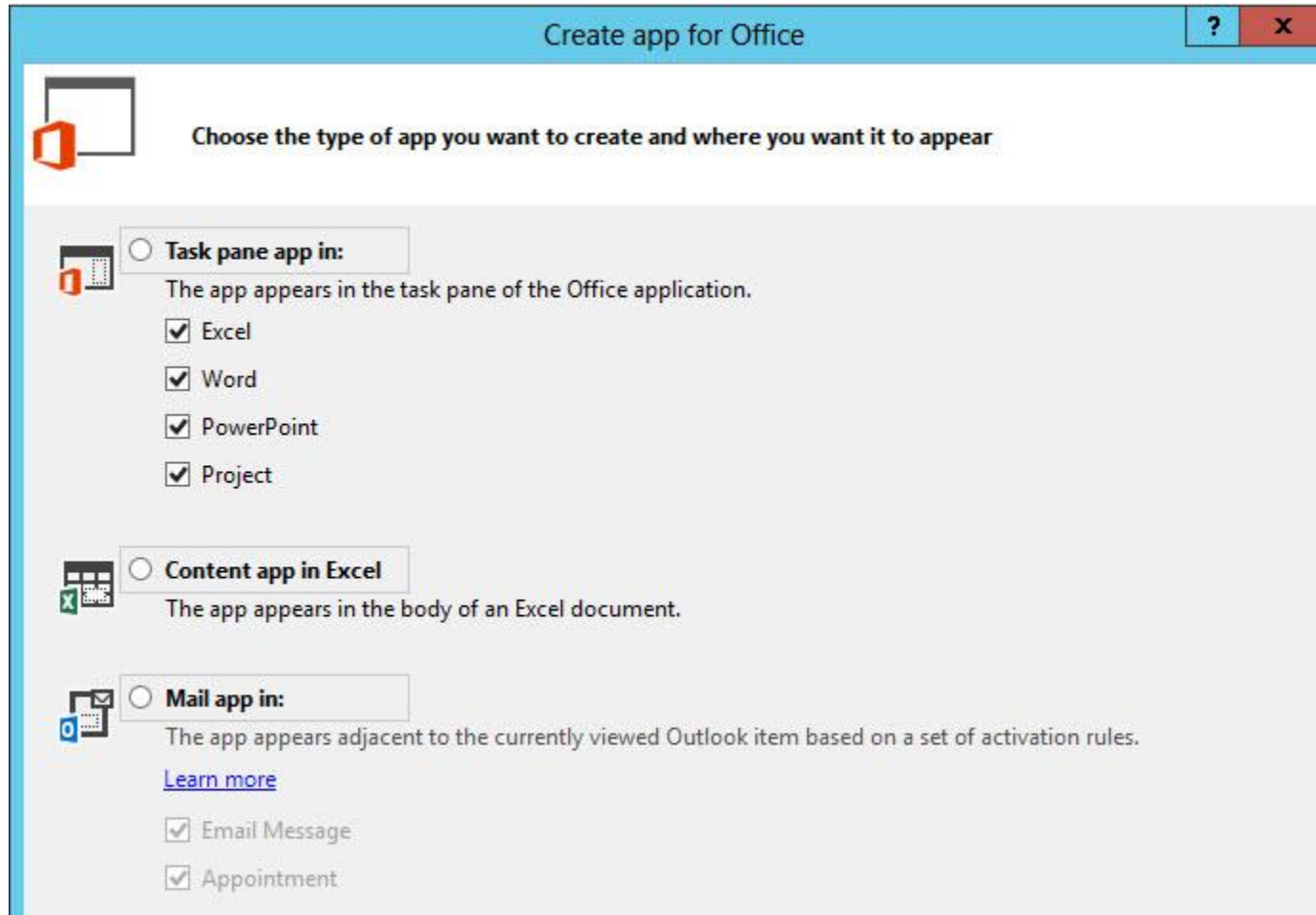- UI Custom Action
- Immersive Full Page

QUESTION 12

Question 12
You need to select the app experience for the CourierMobile app. In the App for Office 2013 dialog window, which configuration option should you select?
(To answer, select the appropriate configuration option in the answer area.)

Hot Area:

Correct Answer:

Create app for Office

Choose the type of app you want to create and where you want it to appear

○ **Task pane app in:**

The app appears in the task pane of the Office application.

☑ Excel

☑ Word

☑ PowerPoint

☑ Project

○ **Content app in Excel**

The app appears in the body of an Excel document.

○ **Mail app in:**

The app appears adjacent to the currently viewed Outlook item based on a set of activation rules.

Learn more

☑ Email Message

☑ Appointment

Section: [none]
Explanation

Explanation/Reference:

SharePoint

Business Requirements

A client asks you to create a basic task tracking app for SharePoint. The app will be hosted remotely. The users will be able to set up task lists, mark tasks as completed, and manage their task lists.

Business Requirements

The client specifies the following business requirements:
- Users can create task lists.
- Users can retrieve task lists.
- Project leads can remove task lists.
- Users can modify task lists.
- Only users with a paid license can use the app.
- Tasks can be tagged with the programming language being used. Task list items may be tagged only with the following terms: C++, C#, and JavaScript.
- Navigational links across the top should be driven by the term store and use URLs that will improve search engine ranking.
- Set a system message that all users can access without the need to query a data source.
- Remote users will authenticate to the app by using a username and password.
- During development, the app will be tested by deploying to a development SharePoint site at http://contoso.sharepoint.com/tasks.
- When completed, the app will be published to the Microsoft Store as a paid app.

Existing Site Configuration

The table below shows the current site configuration for the client's SharePoint site.

Site/ Site Collection	Description
http://contoso-public.sharepoint.com	Public-facing site
https://contoso.sharepoint.com/tasks	Development site for tasks app
https://contoso.sharepoint.com/search	Search site
https://contoso-my.sharepoint.com	Personal My Site

Task List Design

The app should create a SharePoint list named Tasks with the following attributes:

Field Name	Data Type	Contents
Department	Text	
Description	Text	
Hours	Number	
Completed	Radio Button	"Yes", "No"

User Groups

SharePoint groups will be used to manage access to features of the app.

Group	Description
Admin	Admin can perform all tasks including creating projects, assigning users to projects, and maintaining all task lists.
Project Leads	Project leaders are the only members who have the ability to delete tasks.
Users	Users have the ability to add and manage tasks in their own projects, but cannot delete tasks.

Task Display

The app should retrieve the Tasks list and display the contents on a webpage 20 tasks at a time.

Technical Requirements

You have the following requirements:
- Query the Microsoft apps licensing service to validate the license.
- Package and configure the app.
- Configure navigation to use taxonomy-based navigation automatically generated by SharePoint.
- Utilize CSOM to retrieve data from the SharePoint site.
- Implement the system message by using a property bag that uses the key named SystemMessage.
- Implement and configure the credential store.
- The app will be internally tested for at least one month to track and fix any run- time errors.

Pending Issues

When you deploy the app from Visual Studio 2012, you receive the error:
`"Error occurred in deployment step 'Install app for SharePoint': Sideloading of apps is not enabled on this site."`

Application Structure

Relevant portions of the app files are shown below. (Line numbers in the code segments are included for reference only and include a two-character prefix that denotes the specific file to which they belong.)

LicenseValidation.cs

```
LV01  protected bool IsLicenseValid(Guid productId, ClientContext context)
LV02  {
LV03      string token = "";
LV04      ClientResult<AppLicenseCollection> licenseCollection =
              Utility.GetAppLicenseinformation(context, productId);
LV05      context.Load(context.Web);
LV06      context.ExecuteQuery();
LV07      foreach (AppLicense license in licenseCollection.Value)
LV08      {
LV09          token = license.RawXMLLicenseToken;
LV10          break;
LV11      }
LV12      VerificationServiceClient service = null;
LV13      VerifyEntitlementTokenResponse result = null;
LV14      VerifyEntitlementTokenRequest request = new VerifyEntitlementTokenRequest();
LV15      request.EntitlementToken = token;
LV16      service = new VerificationServiceClient();
LV17      result = service.VerifyEntitlementToken(request);
LV18      if (result != null && result.AssetId != null)
LV19
LV20      }
LV21      return false ;
LV22  }
```

SystemMessage.cs

```
SM01  public void SetSystemMessage(string message)
SM02  {
SM03      string url = "https://sharepoint.contoso.com/tasks";
SM04      string property = "SystemMessage";
SM05      var con text= new ClientContext(url) ;
SM06      NetworkCredential credentials = new NetworkCredential("" , "" , "");
SM07      context.Credentials = credentials;
SM08
SM09      Site site = context.Site;
SM10      context.Load(site);
SM11      Web web = site.RootWeb;
SM12      context.Load(web, w => w.AllProperties);
SM13      context.ExecuteOuery();
SM14      PropertyValues propertyValues = web.AllProperties;
SM15      context.Load(propertyValues);
SM16      web.AllProperties[property] = message;
SM17      web.Update();
SM18  }
```

ImplementTaskList.cs

```
IL01  protected void ImplementTaskList()
IL02  {
IL03      ClientContext context = new ClientContext("http://sharepoint.contoso.com/tasks");
IL04      List list = context.Web.Lists.GetByTitle("Announcements");
IL05      Field department = list.Fields.AddField.AsXml(
IL06          "<Field DisplayName='Department' Type='Text' />" ,
IL07          true,
IL08          AddFieldOptions.DefaultValue);
IL09      FieldText departmentField = context.CastTo<FieldText>(department);
IL10      departmentField.Update();
IL11      Field description = list.Fields.AddField.AsXml(
IL12          "<Field DisplayName='Description' Type='Text' />" ,
IL13          true,
IL14          AddFieldOptions.DefaultValue);
IL15      FieldText descriptionField = context.CastTo<FieldText>(description);
IL16      descriptionField.Update();
IL17      Field hours = list.Fields.AddFieldAsXml(
IL18          "<Field DisplayName='Hours' Type='Number' />" ,
IL19          true, AddFieldOptions.DefaultValue);
IL20      FieldNumber hoursField = context.CastTo<FieldNumber>(hours);
IL21      hoursField.Update();
IL22
IL23      context.ExecuteQuery();
IL24  }
```

RetrieveTaskList.cs

```
RT01  protected void RetrieveTaskList()
RT02  {
RT03      ClientContext context =
RT04          new ClientContext("https://sharepoint.contoso.com/tasks");
RT05      List taskList = context.Web.Lists.GetByTitle("Tasks");
RT06      CamlQuery query = CamlQuery.CreateAllItemsQuery(20);
RT07      Microsoft.SharePoint.Client.ListItemCollection
RT08          tasks = taskList.GetItems(query);
RT09      context.Load(tasks);
RT10      context.ExecuteQuery();
RT11      foreach (Microsoft.SharePoint.Client.ListItem task in tasks)
RT12      {
RT13          ...
RT14      }
RT15  }
```

CanDeleteTask.cs

```
CD01  protected bool CanDeleteTask(string targetEmail)
CD02  {
CD03      ClientContext context = new ClientContext("https://sharepoint.contoso.com/tasks");
CD04
CD05      context.ExecuteQuery();
CD06
CD07      foreach (User user in members.Users)
CD08      {
CD09          if (user.Email == targetEmail)
CD10          {
CD11              return true;
CD12          }
CD13      }
CD14      return false;
CD15  }
```

TermSetNavigation.cs

```
TN01   void CreateNavigationTermSet()
TN02   {
TN03       ClientContext clientConcext = new ClientConcext("https://sharepoint.concoso.com/tasks");
TN04       TaxonomySession session = TaxonomySession.GetTaxonomySession(clientContext);
TN05       taxonomySession.UpdateCache();
TN06       clientContext.Load(session, ts => ts.TermStores);
TN07       clientContext.ExecuteQuery();
TN08       TermStore store = taxonomySession.TermStores[0];
TN09       clientContext.Load(store,
TN10           s => s.Name,
TN11           s => s.WorkingLanguage);
TN12       TermGroup siteCollectionGroup = termStore.GetSiteCollectionGroup(
               clientContext.Site, createIfMissing: true);
TN13       TermSet set = siteCollectionGroup.CreateTermSet("Task Terms");
TN14       store.CommitAll();
TN15       clientContext.ExecuteQuery();
TN16
TN17       termSet.IsNavigationTermSet = true;
TN18       termSet.TargetUrlForChildTerms.Value = "~site/Pages/Tasks/Tasks.aspx";
TN19       termStore.CommitAll();
TN20       clientContext.ExecuteQuery();
TN21       NavigationTerm term = termSet.CreateTerm("Programming Languages",
TN22           NavigationLinkType.SimpleLink, Guid.NewGuid());
TN23       term.SimpleLinkUrl = "https://sharepoint.contoso.com/tasks";
TN24
TN25       term.GetTaxonomyTerm().TermStore.CommitAll();
TN26       clientContext.ExecuteQuery();
TN27   }
```

QUESTION 1
Question 1
You need add to code at line IL22 to implement the task list design.

How should you complete the relevant code?
(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.)

Select and Place:

Answer Area

| Text | ```
Field completed = list.Fields.AddFieldAsXml(
    "<Field DisplayName='Completed'
    Type=[          ] />",
    true, AddFieldOptions.DefaultValue);
FieldChoice completedField =
    context.CastTo<FieldChoice>(completed);
completedField.EditFormat =
    ChoiceFormatType.[          ];
string[] choices = {[          ]};

completedField.Choices = choices;
``` |
Choice	
DropDown	
FieldText	
FieldChoice	
RadioButtons	
"Yes", "No"	
"True", "False"	

Correct Answer:

Answer Area

Text		Field completed = list.Fields.AddFieldAsXml(
Choice		"<Field DisplayName='Completed'
DropDown		Type= Choice />",
FieldText		true, AddFieldOptions.DefaultValue);
FieldChoice		FieldChoice completedField =
RadioButtons		context.CastTo<FieldChoice>(completed);

```
Field completed = list.Fields.AddFieldAsXml(
    "<Field DisplayName='Completed'
    Type= [Choice]          />",
    true, AddFieldOptions.DefaultValue);
FieldChoice completedField =
    context.CastTo<FieldChoice>(completed);
completedField.EditFormat =
    ChoiceFormatType. [RadioButtons]  ;
string[] choices = { ["Yes", "No"]  };
completedField.Choices = choices;
```

Choices in left column:
- Text
- Choice
- DropDown
- FieldText
- FieldChoice
- RadioButtons
- "Yes", "No"
- "True", "False"

Section: [none]
Explanation

Explanation/Reference:

QUESTION 2
Question 2
You need to validate that specific users can delete tasks.

Which code segment should you insert at line CD04?

A.
```
GroupCollection groups = context.Web.SiteGroups;
Group members = groups.GetByName("Users");
context.Load(members.Groups);
```

B.
```
GroupCollection groups = context.Web.SiteGroups;
Group members = groups.GetByName("Users");
context.Load(members.Users);
```

C.
```
List groups = context.Web.SiteUserInfoList;
Group members = groups.GetByName("Project Leads");
context.Load(members.Users);
```

D.
```
GroupCollection groups = context.Web.SiteGroups;
Group members = groups.GetByName("Project Leads");
context.Load(members.Users);
```

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
From scenario:
▪ Project leads can remove task lists.

QUESTION 3
Question 3
You need to configure the credential store for the app. Which properties should you configure?
(Each correct answer presents part of the solution. Choose all that apply.)

A. Pin

B. Windows Password

C. Windows User Name

D. Password

E. User Name

Correct Answer: DE
Section: [none]
Explanation

Explanation/Reference:
From scenario:
▪ A client asks you to create a basic task tracking app for SharePoint. The app will be hosted remotely
▪ Remote users will authenticate to the app by using a username and password.

QUESTION 4
Question 4

You need to implement term set navigation.

Which code segment should you insert at line TN16?

A.
```
NavigationTermSet navigationTerms = NavigationTermSet.GetAsResolvedByWeb(
    clientContext, NavigationTermSet, clientContext.Web, "GlobalNavigationTaxonomyProvider");
```

B.
```
NavigationTermSet navigationTerms = NavigationTermSet.GetAsResolvedByWeb(
    clientContext, NavigationTermSet, clientContext.Web, "GlobalNavigationSwitchableProvider");
```

C.
```
NavigationTermSet navigationTerms = NavigationTermSet.GetAsResolvedByWeb(
    clientContext, NavigationTermSet, clientContext.Web, "CurrentNavigationTaxonomyProvider");
```

D.
```
NavigationTermSet navigationTerms = NavigationTermSet.GetAsResolvedByWeb(
    clientContext, NavigationTermSet, clientContext.Web, "CurrentNavigationSwitchableProvider");
```

Correct Answer: A
Section: [none]
Explanation

Explanation/Reference:
From scenario:
* Navigational links **across the top** should be driven by the term store and use URLs that will improve search engine ranking.

NavigationTermSet.**GetAsResolvedByWeb** method constructs an editable NavigationTermSet object that is bound to the specified TermSet object.

public static NavigationTermSet GetAsResolvedByWeb(
    TermSet termSet,
    SPWeb web,
    string **siteMapProviderName**
)

https://msdn.microsoft.com/en-us/library/office/microsoft.sharepoint.publishing.navigation.navigationtermset.getasresolvedbyweb.aspx

GlobalNavigationTaxonomyProvider: the TaxonomySiteMapProvider instance used for the global navigation scheme.
CurrentNavigationSwitchableProvider: the TaxonomySiteMapProvider instance used for the current navigation scheme. whose menu typically appears on the left side of the master page.

http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.publishing.navigation.standardnavigationprovidernames_members.aspx

QUESTION 5
Question 5
You need to implement term set navigation.

Which code segment should you insert at line TN24?

A. ```
NavigationTerm childTerm =
    term.CreateTerm("C++", NavigationLinkType.Root, Guid.NewGuid());
```

B. ```
NavigationTerm childTerm =
    term.CreateTerm("C++", NavigationLinkType.Default, Guid.NewGuid());
```

C. ```
NavigationTerm childTerm =
    term.CreateTerm("C++", NavigationLinkType.SimpleLink, Guid.NewGuid());
```

D. ```
NavigationTerm childTerm =
    term.CreateTerm("C++", NavigationLinkType.FriendlyUrl, Guid.NewGuid());
```

**Correct Answer:** D
**Section: [none]**
**Explanation**

**Explanation/Reference:**
From scenario:
* Navigational links across the top should be driven by the term store and use URLs that will improve search engine ranking.

The NavigationLinkType enumeration has the following members.
▪ FriendlyUrl Specifies a navigation node that defines a new URL for an existing SharePoint page by rewriting the URL.
▪ Root  Specifies the root node in the navigation tree that corresponds to a NavigationTermSet object.
▪ SimpleLink Specifies a navigation node with a standard hyperlink to an already existing URL. The URL can be an empty string, in which case the navigation node acts as a simple heading in the menu.

http://msdn.microsoft.com/library/microsoft.sharepoint.publishing.navigation.navigationlinktype.aspx

**QUESTION 6**
**Question 6**
You need to configure navigation for the site.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

A. Create simple links or headers for new pages.
B. Create friendly URLs for new pages automatically.
C. Add unique identifiers to new pages.
D. Create term-driven pages with friendly URLs.
E. Add new pages to navigation automatically.

**Correct Answer:** ACD
**Section: [none]**
**Explanation**

**Explanation/Reference:**

**QUESTION 7**
**Question 7**
You need to complete the code at line LV19 to implement the validation of the app license.

Which code segment should you use?

A.
```
if (result.EntitlementType.ToLower() == "trial")
{
    return true;
}
```

B.
```
if (result.EntitlementType.ToLower() == "valid")
{
    return true;
}
```

C.
```
if (result.EntitlementType.ToLower() == "paid")
{
    return true;
}
```

D.
```
if (result.EntitlementType.ToLower() == "free")
{
    return true;
}
```

**Correct Answer:** C
**Section: [none]**
**Explanation**

**Explanation/Reference:**
From scenario:
▪ Only users with a paid license can use the app.

Valid values include Free, Paid, and Trial.

**QUESTION 8**
Question 8
You need to deploy the package. Which file should you select?

A. the file ending in .publish
B. the file ending in .wsp
C. the file ending in .dll
D. the file ending in .app

**Correct Answer:** D
**Section: [none]**
**Explanation**

**Explanation/Reference:**
From scenario:
▪ When completed, the app will be published to the Microsoft Store as a paid app.

**QUESTION 9**
Question 9
You receive an error when you deploy the app. You need to resolve the error.

What should you do?

A. Deploy the app to http://contoso-public.sharepoint.com.
B. Enable side-loading of apps in the Visual Studio project properties.
C. Deploy the app to https://contoso-my.sharepoint.com.
D. Create a deployment package and upload the app to the app catalog in SharePoint.
E. Deploy the app to https://contoso.sharepoint.com/tasks.
F. Enable side-loading of apps in the app manifest.

**Correct Answer:** B
**Section: [none]**
**Explanation**

**Explanation/Reference:**

This happens, because in order to deploy apps to a site-collection one of the following must be true.
- The site-collection must be the root site collection if it's a host named site-collection (all SharePoint online site-collections are host named)
- The site-collection features, **Developer** (e374875e-06b6-11e0-b0fa-57f5dfd72085) or **EnableAppSideloading** (AE3A1339-61F5-4f8f-81A7-ABD2DA956A7D) must be enabled

http://wp.sjkp.dk/sideloading-of-apps-is-not-enabled-on-this-site/
http://blogs.msdn.com/b/how24/archive/2013/06/14/prepare-your-sharepoint-2013-farm-for-app-development-and-debugging.aspx

Wright answer should be
```
Enable-SPFeature –Identity "EnableAppSideLoading" –url <siteurl>
```

*Scenario:* Pending Issues
When you deploy the app from Visual Studio 2012, you receive the error: "Error occurred in deployment step 'Install app for SharePoint': Sideloading of apps is not enabled on this site."

*Bhupesh (India), 20.01.14*:
Side-loading Feature need to activate at site level not in VS project properties
*Sickstone (Australia, 11.03.14)*: Side-loading question had no Visual Studio answer
*abc (Germany, 13.06.14)*: there was a new correct option to enable site-loading in site features.
*f (Poland, 19.06.14)*: enable side-loading?
*jinga (Belgium, 16.06.14)*: Correct answer is E or D deploy the app to https://contoso.sharepoint.com/tasks. Sideloading is a feature enabled on dev sites. This site is a dev according to the case study. or answer D: creating a deployment packages and deploy it correctly to SharePoint
*Duckl (Germany, 27.10.14)*: new option enable side-loading on SITE (but had the enable in VS also)
*KL (Hong Kong, 8.12.14)*: New question for CM case: You receive an error when you deploy the app. You need to resolve the error.
A. Enable side-loading of apps in the app manifest
B. Enable side-loading of apps in the Visual Studio project properties
C. Enable side-loading of apps in the feature properties
D. Deploy the app to https://contoso.sharepoint.com/tasks
I choose D. Because side-loading is enabled by PowerShell script. The dump answer is wrong.
*Mateusz (Poland, 12.12.14)*: B. Deploy the app to constoso.sharepoint.com/tasks because it's a dev site. I don't see the way how to enable side-loading on Visual Studio.
But on the exam I had an answer: Enable side-loading on the site. This could work too, I guess.

ABCE: *70-517(B3)/Sam(B4)/Angie1(B4)/Anon(B4)/Niki(B4)/Angie2(B3)/Angie3(B2)/Alberta(B3)/Noam(B3)/Hellen(B3)/MsExam(A5)*: Answer A
DFCB: *70-517(B8)/Sam(B9)/Angie1(B9)/Anon(B9)/Niki(B9)/Angie2(B5)/Angie3(B6)/Alberta(B7)/Javier/Ronnie/Gwen/Eleonora/Noam(B8)/Hellen(B8)/MsExam(B8)*: Answer D
ECBF: *MsExam(B11)*: Answer F

**Testlet 1**

# Coho Winery

**Background**

Coho Winery implements a SharePoint farm. They have an intranet site for company employees and an extranet site for their customers.

Coho Winery sells products to wholesale and retail customers.

Customers must be able to order specific brands and pay directly.

**Business Requirements**

**Site Collection**

The company must organize its main enterprise site to have multiple site collections for different wine brands from various regions.

Site documents must have a consistent look and feel.

**New Features**

The first version (1.0.0.0) of the feature must support the addition of newer functionality when the feature is upgraded to version 1.5.0.0.

**Technical Requirements**

**General**

- A Document content type named Finance must be created at the site level. It must contain two site columns named Customer Name and Transaction Date.
- The Order Details and Payment Confirmation content types must be derived from the Finance content type.
- Workflows associated with document content types must be initiated when documents are generated.
- When Payment Confirmation documents are generated, a workflow must send a notification to the customer by email.

**User Authorization**

- A custom role named Whole sale must be created. Wholesale customers must be assigned to this role in order to view the promotions page.
- A custom permission level must be created. This permission level must add the ViewPages permission to the existing base permissions. This permission level must be added to Wholesale user role.
- Anonymous users must be able to browse the site with limited access to resources.
- The web application has been created with anonymous access enabled.
- Users are prompted for credentials when they browse to the site.

**Application Lifecycle Management**

- Versioning of the solution artifacts must adhere to industry best practices.
- In a future upgrade process, a new site column named Division must be added to the Finance content type programmatically.
- Only one version of an assembly must be available at runtime.
- Code based hot fixes must be deployed directly to the Global Assembly Cache on all SharePoint servers.
- During maintenance periods, content must be available but must not be modified.

**Backup and Recovery**

- In the event of hardware failure, the SharePoint environment must be restored to the most recent date.
- The backup process must not degrade system performance.

**Performance Optimization and Memory Usage**

SPSite objects must be removed from memory immediately after the objects go out of scope.

**Automation**

Windows PowerShell must be used to automate all operations wherever possible.

**Application Structure**

Relevant portions of the application files are shown below. (Line numbers in the code segments are included for reference only and include a two-character prefix that denotes the specific file to which they belong.)

**ContentType.cs**

```
CT01  public override void FeatureActivated(SPFeatureReceiverProperties spFtRcvProperties)
CT02  {
CT03      SPWeb web = ((SPSite)spFtRcvProperties.Feature.Parent).RootWeb;
CT04      string financeColumn = "Finance Columns";
CT05      string customerFieldName = web.Fields.Add("Customer Name", SPFieldType.Text, true);
CT06
CT07      string transDateFieldName = web.Fields.Add("Transaction Date", SPFieldType.DateTime, true);
CT08      ...
CT09      string contentTypeGroup = "Finance Content Types";
CT10      SPContentType docContentType = web.AvailableContentTypes[SPBuiltInContentTypeId.Document];
CT11
CT12      docContentType1 = web.ContentTypes.Add(docContentType1);
CT13      docContentType1.Group = contentTypeGroup;
CT14      SPFieldLink transDateFieldRef = new SPFieldLink(transDateField);
CT15      transDateFieldRef.Required = true;
CT16      docContentType1.FieldLinks.Add(transDateFieldRef);
CT17      docContentType1.Update();
CT18      docContentType2 = web.ContentTypes.Add(docContentType2);
CT19      docContentType2.Group = contentTypeGroup;
CT20      SPFieldLink titleODFieldRef = docContentType2.FieldLinks[SPBuiltInFieldId.Title];
CT21      ...
CT22      titleODFieldRef.Required = true;
CT23      ...
CT24      docContentType2.Update();
CT25      docContentType3 = web.ContentTypes.Add(docContentType3);
CT26      docContentType3.Group = contentTypeGroup;
CT27      SPFieldLink titlePmtFieldRef = docContentType3.FieldLinks[SPBuiltInFieldId.Title];
CT28      ...
CT29      titlePmtFieldRef.Required = true;
CT30      ...
CT31      docContentType3.Update();
CT32  }
CT33
CT34  {
CT35      SPWeb parentWeb = (SPWeb)properties.Feature.Parent;
CT36      switch (upgradeActionName)
CT37      {
CT38          case "                                              ";
CT39              ...
CT40              break;
CT41
CT42          default:
CT43              ...
CT44              break;
CT45      }
CT46  }
```

UserAuthorization.cs

```
UA01   private SPBasePermissions _permissions = SPBasePermissions.EmptyMask;
UA02   public override void FeatureActivated (SPFeatureReceiverProperties properties)
UA03   {
UA04       try
UA05       {
UA06           SPSite site = new SPSite("http://localhost:80/sites/brands/Wholesale");
UA07
UA08           using(SPWeb web = site.RootWeb)
UA09           {
UA10               _permissions= this.GetExistingPermissions();
UA11
UA12               foreach (SPWeb spWebItem in web.Webs)
UA13               {
UA14                   ...
UA15               }
UA16           }
UA17       }
UA18       catch
UA19       {
UA20
UA21       }
UA22
UA23   }
UA24   private SPBasePermissions GetExistingPermissions()
UA25   {
UA26       SPBasePermissions permissions = SPBasePermissions.EmptyMask;
UA27       ...
UA28       return permissions;
UA29   }
```

ContentType.Finance.Template.xml

```
CX01    <Feature Id="08380D6A-858C-4618-9525-5OE9D6DEAD53"
CX02      Title="ContentType.Finance"
CX03      Description="Content type for Finance"
CX04      ReceiverClass="MyFeatureReceiver.MyReceiver"
CX05      xmlns="http://schemas.microsoft.com/sharepoint/">
CX06      ...
CX07      <ElementManifests>
CX08        <ElementManifest Location="ElementsV1.xml" />
CX09        <ElementManifest Location="ElementsV2.xml" />
CX10      </ElementManifests>
CX11
CX12      <UpgradeActions>
CX13
CX14        <ApplyElementManifests>
CX15          <ElementManifest Location="ElementsV2.xml" />
CX16        </ApplyElementManifests>
CX17        <AddContentTypeField
CX18          ContentTypeId="0x010123FlSADB2FA333AA49848E7E01BC79C9753222"
CX19          FieldId="{4FB9816F-799D-41F3-B801-B8FSFEB3ASCD}" />
CX20          <CustomUpgradeAction Name="          ">
CX21            <Parameters>
CX22              <Parameter Name="Division">Finance</Parameter>
CX23            </Parameters>
CX24          </CustomUpgradeAction>
CX25
CX26      </UpgradeActions>
CX27
CX28    </Feature>
```

ExportWholesaleSites.ps1

```
EW01   $site = Get-SPSite "http://localhost:80/sites/brands/Wholesale";
EW02   foreach ($web in $site.AllWebs)
EW03   {
EW04
EW05       $web | Export-SPWeb -Path ($web.Title + ".cmp") -Force;
EW06       $date = Get-Date;
EW07       if ($web.AllProperties["LastWebExport"] -eq $ null)
EW08       {
EW09           $web.AddProperty("LastWebExport", $date);
EW10           $web.Update();
EW11       }
EW12       else
EW13       {
EW14           $web.SetProperty("LastWebExport", $date);
EW15           $web.Update();
EW16       }
EW17
EW18   }
```

QUESTION 1
Question 1
You need to automate the backup of a site collection.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

A. Back up to a network folder.
B. Set the LockStatus of the site collection to Adding content prevented
C. Back up to a local folder and then move the backup to a network folder.
D. Use Central Administration to perform the backup.
E. Use Windows PowerShell to perform the backup.

Correct Answer: AE
Section: [none]
Explanation

Explanation/Reference:
Scenario:
▪   During maintenance periods, content must be available but must not be **modified**.
▪   The backup process must not degrade system performance.

The following table describes the **locking options** that are available in Microsoft SharePoint Foundation 2010.
- Not locked - unlocks the site collection and makes it available to users.
- **Adding content prevented** - Prevents users from adding new content to the site collection. Updates and deletions are still allowed.
- **Read-only (prevents additions, updates, and deletions)** - prevents users from adding, updating, or deleting content.
- No access - prevents users from accessing the site collection and its content. Users who attempt to access the site receive an error.

```
Set-SPSite -Identity "<SiteCollection>" -LockState "<State>"
```

https://technet.microsoft.com/en-us/library/ff631148.aspx

A? B???

Noam/MsExam: Answer AD
Mateusz (Poland, 12.12.14): A and E (powershell, nod CA). In the case study there was a sentence: Use power-shell wherever possible, so I go with E, not D.

QUESTION 2
Question 2
You need to add code at line CT11 to create the content types.

How should you complete the relevant code?
(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.)

Select and Place:

Answer Area

(docContentType, web.ContentTypes, "Finance")

(docContentType, web.ContentTypes, "Order Details")

(docContentType, web.ContentTypes, "Payment Confirmation")

(docContentType1, web.ContentTypes, "Finance")

(docContentType1, web.ContentTypes, "Order Details")

(docContentType1, web.ContentTypes, "Payment Confirmation")

(docContentType2, web.ContentTypes, "Payment Confirmation")

SPContentType docContentType1 = new SPContentType

;

SPContentType docContentType2 = new SPContentType

;

SPContentType docContentType3 = new SPContentType

;

Correct Answer:

Answer Area

(docContentType, web.ContentTypes, "Finance")

(docContentType, web.ContentTypes, "Order Details")

(docContentType, web.ContentTypes, "Payment Confirmation")

(docContentType1, web.ContentTypes, "Finance")

(docContentType1, web.ContentTypes, "Order Details")

(docContentType1, web.ContentTypes, "Payment Confirmation")

(docContentType2, web.ContentTypes, "Payment Confirmation")

SPContentType docContentType1 = new SPContentType

(docContentType, web.ContentTypes, "Finance") ;

SPContentType docContentType2 = new SPContentType

(docContentType1, web.ContentTypes, "Order Details") ;

SPContentType docContentType3 = new SPContentType

(docContentType1, web.ContentTypes, "Payment Confirmation") ;

Section: [none]

Explanation

Explanation/Reference:
From scenario:
- A Document content type named Finance must be created at the site level. It must contain two site columns named Customer Name and Transaction Date.
- The Order Details and Payment Confirmation content types must be derived from the Finance content type.

CT20: titleODFieldRef
CT27: titlePmtFieldRef

http://msdn.microsoft.com/en-us/library/ms480288.aspx

QUESTION 3
Question 3
You need to create the required site columns.

How should you complete the relevant code?
(To answer, select the appropriate code segment from each drop-down list in the answer area.)

Hot Area:

```
string customerFieldName = web.Fields.Add(
    "Customer Name", SPFieldType.Text, true);
SPFieldText customerField = web.Fields.
```

| ▼| (customerFieldName) as SPFieldText;

| Add |
| CreateNewField |
| GetFieldByInternalName |

| ▼| ;

| customerField.Group = financeColumn |
| customerField.XPath = financeColumn |
| customerField.RelatedField = financeColumn |

customerField. | ▼| ();

| Commit |
| Update |
| SetCustomProperty |

Correct Answer:

```
string customerFieldName = web.Fields.Add(
    "Customer Name", SPFieldType.Text, true);
SPFieldText customerField = web.Fields.
```

| ▼ | (customerFieldName) as SPFieldText; |

```
Add
CreateNewField
GetFieldByInternalName
```

| ▼ | ; |

```
customerField.Group = financeColumn
customerField.XPath = financeColumn
customerField.RelatedField = financeColumn
```

customerField. | ▼ | ();

```
Commit
Update
SetCustomProperty
```

Section: [none]
Explanation

Explanation/Reference:

QUESTION 4
Question 4
You need to add code at line UA11 to create the custom role.

How should you complete the relevant code?
(To answer, select the appropriate code segment from each drop-down list in the answer area.)

Hot Area:

```
var customRole = new [                      ▼] ();
                     [ SPRoleDefinition          ]
                     [ SPRoleAssignment          ]
                     [ SPRoleDefinitionCollection ]

customRole.Name = "Wholesale";
customRole.Description = "Custom role for Wholesale customers";

[                                    ▼] ;
[ web.RoleAssignment.Add(customRole)           ]
[ web.RoleDefinitions.Add(customRole)          ]
[ web.RoleDefinitionCollection.Add(customRole) ]

[                                    ▼] ;
[ web.Commit()                                 ]
[ web.Update()                                 ]
[ web.AddProperty(customRole, _permissions)    ]
```

Correct Answer:

```
var customRole = new [                      ▼] ();
                     [ SPRoleDefinition          ]
                     [ SPRoleAssignment          ]
                     [ SPRoleDefinitionCollection ]

customRole.Name = "Wholesale";
customRole.Description = "Custom role for Wholesale customers";

[                                    ▼] ;
[ web.RoleAssignment.Add(customRole)           ]
[ web.RoleDefinitions.Add(customRole)          ]
[ web.RoleDefinitionCollection.Add(customRole) ]

[                                    ▼] ;
[ web.Commit()                                 ]
[ web.Update()                                 ]
[ web.AddProperty(customRole, _permissions)    ]
```

Section: [none]
Explanation

Explanation/Reference:

QUESTION 5
Question 5
You need to set the appropriate permission levels. A variable named customRole references Wholesale.

Which code segment should you add at line UA11?

A. customRole.BasePermissions = _permissions | SPBasePermissions.ViewFormPages;

B. customRole.BasePermissions = _permissions | SPBasePermissions.ViewPages;

C. customRole.BasePermissions = SPBasePermissions.EmptyMask | SPBasePermissions.ViewPages;

D. customRole.BasePermissions = SPBasePermissions.ViewPages;

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
ViewPages   View pages in a Web site.

Incorrect:
Not A: ViewFormPagesView forms, views, and application pages, and enumerate lists.
Not C, not D: The previous line, UA10, is: _permissions = this.GetExistingPermissions(); We should add this permission and the ViewPages permission.

From scenario:
▪ A custom role named Wholesale must be created. Wholesale customers must be assigned to this role in order to view the promotions page.
▪ A custom permission level must be created. This permission level must add the **ViewPages** permission to the existing base permissions. This permission level must be added to Wholesale user role.

http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spbasepermissions.aspx

QUESTION 6
Question 6
A server in the SharePoint farm experiences high memory usage. Task Scheduler on the server runs a Windows PowerShell script to perform backups of Wholesale sites.

You need to resolve any memory leak issues in the Windows PowerShell script.

A. Insert the code segment at line EW04:
   `Start-SPAssignment -Global`

B. Insert the code segment at line EW17:
   `$site.Close()`

C. Insert the code segment at line EW17:
   `Stop-SPAssignment -SemiGlobal`

D. Insert the code segment at line EW17:
   `Stop-SPAssignment -Global`

Correct Answer: AC
Section: [none]
Explanation

Explanation/Reference:
- `Start-SPAssignment -Global` initiates a new assignment store.
- `Stop-SPAssignment` disposes of objects in the provided assignment collection.

The Stop-SPAssignment cmdlet disposes of objects in the provided assignment collection.
Use the **Global** parameter to dispose of all objects in the global assignment collector and to stop the global store from collecting additional objects.
Provide a **SemiGlobal** assignment collector to dispose of all contained objects.

https://technet.microsoft.com/en-us/library/ff607869.aspx

There are three levels of assignment:
- No assignment - The object is not assigned to a variable and is disposed of after each iteration of the command.
- Simple assignment - All objects are assigned to the global assignment store. This is done by using the Global parameter. When using this level, all objects are assigned to a global store and are disposed of when the Stop-SPAssignment cmdlet is called.
- Advanced assignment - Objects are assigned to named stores for disposal. You can dispose of objects by using the Identity parameter with the Stop-SPAssignment cmdlet.

While easier to use simple assignment, running commands that **iterate** through multiple SPSite or SPWeb objects **while simple assignment is enabled is not recommended**. Ensure that Stop-SPAssignment is run before attempting any iterations of multiple objects.

http://technet.microsoft.com/en-us/library/ff607664.aspx

From scenario:
Performance Optimization and Memory Usage
SPSite objects must be removed from memory immediately after the objects go out of scope.

QUESTION 7

Question 7
You must upgrade the existing version of the application to a newer version.

Which two actions should you perform?
(Each correct answer presents part of the solution. Choose all that apply.)

A. Add the following code segment at line CX11:
   ```
   <VersionRange BeginVersion="1.0" EndVersion="2.0">
   ```
B. Add the following code segment at CX13:
   ```
   <VersionRange BeginVersion="1.0.0.0" EndVersion="2.0.0.0">
   ```
C. Use Microsoft Visual Studio to change the feature version to 1.5.0.0.
D. Use Microsoft Visual Studio to change the feature version to 1.5.
E. Add the following code segment at line CX11:
   ```
   <VersionRange BeginVersion="1.0.0.0" EndVersion="2.0.0.0">
   ```

Correct Answer: BC
Section: [none]
Explanation

Explanation/Reference:
Noam/*Hellen*/*MsExam*: Answer BE

QUESTION 8
Question 8
After deploying a solution, a code-based hotfix becomes available. You need to deploy the hotfix.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

A. Use assembly binding redirection in the web application configuration file.
B. Increment the assembly file version of the assembly.
C. Increment the product version of the assembly.
D. Increment the assembly version of the assembly.
E. Use assembly binding redirection in the assembly policy file.

Correct Answer: AD
Section: [none]
Explanation

Explanation/Reference:

Assembly versions are everywhere in SharePoint - web.config files, web part definitions, workflow definitions, event receiver bindings - the list goes on. In each case, the version number is absolutely required so that SharePoint can load the code to run at that time. If you update an assembly's version, you have two choices to ensure your code can still be loaded:

- Find and update every reference to the previous assembly version.
- Use a binding redirect in the relevant .config file (e.g. web.config) to point to the new version of the assembly.

D: Assembly Version: This is the version number used by framework during build and at runtime to locate, link and load the assemblies. When you add reference to any assembly in your project, it is this version number which gets embedded. At runtime, CLR looks for assembly with this version number to load. But remember this version is used along with name, public key token and culture information only if the assemblies are strong-named signed. If assemblies are not strong-named signed, only file names are used for loading.

Incorrect:
not B: Assembly File Version : This is the version number given to file as in file system. It is displayed by Windows Explorer. Its never used by .NET framework or runtime for referencing.

From scenario:
- Solution artifacts must adhere to industry best practices.
- Code based hot fixes must be deployed directly to the Global Assembly Cache on all SharePoint servers.
- Only one version of an assembly must be available at runtime.

All: Answer AC
Niki,Alberta: Answer AD

QUESTION 9
Question 9
Customers report that upon creation of the Payment Confirmation document, they do not receive a confirmation message.

You need to ensure that customers receive confirmation messages.

What should you do?

A. Ensure that the user has the correct permissions to start a workflow.
B. Ensure that the Payment Confirmation content type is deployed.
C. Ensure that the user is assigned to the Wholesale role.
D. Ensure that a workflow is associated with the document content type.

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:

From scenario:
- Workflows associated with document content types must be initiated when documents are generated.
- When Payment Confirmation documents are generated, a workflow must send a notification to the customer by email.

Testlet 1

Litware Inc.

Background

You are a SharePoint developer working for Litware Inc., a large bicycle manufacturing company. Litware runs an intranet that is based on SharePoint Server 2010, side-by-side a collaboration space for various departments. The IT department for Litware is migrating a SharePoint 2010 environment to a new SharePoint 2013 farm. Some collaboration site collections are already migrated, including a Marketing site collection.

Business Requirements

Intranet
Litware is redefining its brand identity. It is essential that the new intranet supports a wide variety of mobile devices, platforms, and browsers. Some of the content must be migrated from the old intranet during the implementation. The redesigned intranet must be extensible. The solution must be designed with the changes in the underlying technology in mind.

A marketing company named Graphic Design Institute provides documents and guidelines for the new design for Litware's intranet.

Collaboration
Litware has the following collaboration requirements:
- The collaboration space must include a start page containing information about site owners, contact data, and statistics on site usage. This information must be available for each collaboration space, directly after its creation.
- The project must be delivered in multiple phases.
- The solution must support changes and updates on the structure and functionality of the collaboration spaces.

Marketing collaboration space
Auditors must be able to create reports about the documents the Marketing team produces. Initial reports should show document distribution over projects and information about the most active documents, the top inactive documents, and the most active users. Additional reports will be added over time.

Technical Requirements

Publishing Design for the Intranet
Litware will use the following web application for the intranet: https://intranet.litwareinc.com.
- The publishing site design is delivered as a set of HTML files (litwarepublishing.html), CSS (Litwarepublishing.css), and image files from the marketing company.
- A design package must be created for easier deployment over various platforms.
- During the creation and application of the design package to the publishing site, SharePoint 2013 out-of-the-box capabilities must be used as much as possible to ensure simple design changes and to simplify the upgrade procedures.
- The publishing site must support rendering on a number of devices, starting with Windows Phone.
- Apart from being deployed on all existing publishing sites, the design package must be automatically applied each time a publishing site is created.
- A search box must be available on all publishing sites.

Collaboration

Litware will use two additional web applications for the collaboration:
- Collaboration 1: https://collab1.litwareinc.com
- Collaboration 2: https://collab2.litwareinc.com

Most of the features contained within the Team Site template are sufficient; however, a few additions to the template must be made to support the business requirements. In order to achieve this and ensure maximum portability, a web template based on the Team Site definition must be created.

A three-state workflow must be used to manage business processes. A customized default home page must be deployed by using a site feature.

Feature IDs:
- Three-state workflow: FDE5D850-671E-4143-950A-87B473922DC7
- Litware Web Artifacts: DBF80SAB-03D9-43DC-9154-52D6AC54689F

The project must be implemented in phases, so a solution must be developed to support upgrade procedures.

As soon as the package containing the web template Litware.Intranet.Templates.wsp is deployed, the Litware Team Site template must be available for use in all site collections.

In order to make the solution as extensible as possible, all core functionality should be moved to the separate package Litware.Intranet.Core.wsp.

Deployment of the package containing the Litware web templates Litware.Intranet.Templates.wsp must be prevented if the core package is not deployed in order to prevent deployment errors and eventually damage on the site structure itself.

Litware.Intranet.Templates contains two features:
- The LitwareWebTemplateFeature feature contains the Litware Team Site web template. Templates with this title must be available in the group Litware in the template selection.
- The LitwareWebArtifacts hidden feature contains code required to run after the provisioning is completed. The LitwareWebArtifacts feature can be activated only if the LitwareWebTemplateFeature feature is activated as well.

Marketing site collection

An existing marketing collaboration site located in a web application named Collaboration 1 is located at https://collab1.litwareinc.com/sites/marketing.
- Collaboration 1 contains a document library with approximately 9000 documents for approximately 200 projects.
- The largest project contains 120 files.
- Documents are assigned to appropriate projects by using the Projects field.
- The farm uses the default throttle settings.
- Users report that they cannot sort documents in the marketing collaboration site.

Auditors have access to the page that provides statistics on Marketing documents. This page contains a report on document distribution over projects and information about the most active documents, the top inactive documents, and the most active users. Processing the queries can result in working with huge result sets. You must ensure that the information on this page is always available and that the queries are not throttled. The relevant code segment is available in the code sections area (MarketingAudit.ascx.cs).

Application Structure

Relevant portions of the app files are shown below. (Line numbers in the code segments are included for reference only and include a two-letter prefix that denotes the specific file to which they belong.)

Element.xml file from Litware.Intranet.Templates.wsp:

```
PB01  <?xml version="1.0" encoding="utf-8" ?>
PB02  <Elements xmlns="http://schemas.microsoft.com/sharepoint/">
PB03    <PropertyBag ParentType="Web">
PB04      <Property Name="litware.teamsite.wt_ID"
PB05         Type="string" Value= "WTLitwareTeamSite" />
PB06    </PropertyBag>
PB07  </Elements>
```

MarketingAudit.ascx.cs

```
MA01  protected override void RenderContents(System.Web.UI.HtmlTextWriter writer)
MA02  {
MA03      SPWeb spWeb = SPContext.Current.Web;
MA04      SPList spList = spWeb.Lists["Documents"];
MA05      SPUser spUser = SPConcext.Current.Web.CurrentUser;
MA06      SPQuery spQuery = new SPQuery();
MA07
MA08
MA09
MA10      if (spUser.IsSiteAdmin || spUser.IsSiteAuditor)
MA11      {
MA12          ...
MA13      }
MA14      else
MA15      {
MA16          writer.Write("<p>You do not have enough privileges to run this report.
                     Please contact your system administrator.</p>");
MA17      }
MA18
MA19      base.RenderContents(writer);
MA20  }
```

QUESTION 1
Question 1
You need to create a collaboration template.

How should you complete the relevant code?
(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:

Answer Area

Name

Title

Template

TemplateID

WebTemplate

DisplayCategory

BaseTemplateName

```
<?xml version="1.0" encoding="utf-8"?>
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">
  <
            ="STS"
    BaseTemplateID="0"
    BaseConfigurationID="0"
            ="LitwareTeamSite"
            ="Litware Team Site"
            ="Litware" />
</Elements>
```

Correct Answer:

Answer Area

```xml
<?xml version="1.0" encoding="utf-8"?>
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">
  < WebTemplate
    BaseTemplateName ="STS"
    BaseTemplateID="0"
    BaseConfigurationID="0"
    Name            ="LitwareTeamSite"
    Title           ="Litware Team Site"
    DisplayCategory ="Litware" />
</Elements>
```

Drag items:
- Name
- Title
- Template
- TemplateID
- WebTemplate
- DisplayCategory
- BaseTemplateName

Section: [none]
Explanation

Explanation/Reference:
From Scenario:
Most of the features contained within the Team Site template are sufficient; however, a few additions to the template must be made to support the business requirements. In order to achieve this and ensure maximum portability, a web template based on the Team Site definition must be created.

QUESTION 2
Question 2
You need to apply the Design Package to all of the required sites.

How should you complete the relevant code?
(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).

Select and Place:

Answer Area

LitwareIncTemplate#0

OSRV#0

STS#0

GLOBAL

Feature

FeatureStapler

FeatureTemplate

FeatureTemplateStapler

BLANKINTERNET#0

WTLitwareTeamSite

litware.teamsite.wt_ID

FeatureWebTemplateAssociation

FeatureSiteTemplateAssociation

```xml
<?xml version="1.0" encoding="utf-8"?>
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">

  <[                    ]
     Id="1af9c070-8e74-4554-aa03-4373a812e5ac"
     TemplateName="[                    ]" />

</Elements>
```

Correct Answer:

Answer Area

LitwareIncTemplate#0	
OSRV#0	
STS#0	
GLOBAL	
Feature	
FeatureStapler	
FeatureTemplate	
FeatureTemplateStapler	
BLANKINTERNET#0	
WTLitwareTeamSite	
litware.teamsite.wt_ID	
FeatureWebTemplateAssociation	
FeatureSiteTemplateAssociation	

```xml
<?xml version="1.0" encoding="utf-8"?>
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">

    < FeatureSiteTemplateAssociation

      Id="1af9c070-8e74-4554-aa03-4373a812e5ac"

      TemplateName=" BLANKINTERNET#0        " />

</Elements>
```

Section: [none]
Explanation

Explanation/Reference:
From Scenario:
Publishing Design for the Intranet.
Apart from being deployed on all existing publishing sites, the design package must be automatically applied each time a publishing site is created.

STS#0   Team Site
BLANKINTERNET#0   Publishing Site

FeatureSiteTemplateAssociation element associates the specified Features with the specified site definition configuration so that when Web sites are provisioned, the Features are automatically included.

http://msdn.microsoft.com/en-us/library/office/aa544552.aspx
http://www.sharepointcolumn.com/sharepoint-2013-webtemplates/

QUESTION 3
Question 3
You need to ensure that the features required for the Litware Team Site web template are referenced correctly in the ONET.XML file.

How should you complete the relevant code?
(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.

Select and Place:

```
                                    Answer Area

WebFeatures              <Configuration ID="0" Name="Default"
                             MasterUrl="_catalogs/masterpage/seattle.master">
FarmFeatures               <SiteFeatures>
                               <Feature ID="                                    "/>
SiteCollectionFeatures     </SiteFeatures>

DBF805AB-03D9-43DC-9154-52D6AC54689F    <                                    >

FDE5D850-671E-4143-950A-87B473922DC7       <Feature ID="                                    "/>

                                        </                                    >
                           </Configuration>
```

Correct Answer:

Answer Area

WebFeatures

FarmFeatures

SiteCollectionFeatures

DBF805AB-03D9-43DC-9154-52D6AC54689F

FDE5D850-671E-4143-950A-87B473922DC7

```
<Configuration ID="0" Name="Default"
    MasterUrl="_catalogs/masterpage/seattle.master">
<SiteFeatures>
    <Feature ID=" FDE5D850-671E-4143-950A-87B473922DC7 "/>
</SiteFeatures>
< WebFeatures >
    <Feature ID=" DBF805AB-03D9-43DC-9154-52D6AC54689F "/>
</ WebFeatures >
</Configuration>
```

Section: [none]
Explanation

Explanation/Reference:

QUESTION 4
Question 4
You need to ensure that users can sort files by using the Projects field.

From the List Settings page, which option should you select?
(To answer, select the appropriate option in the answer area.)

Hot Area:

Columns

A column stores information about each document in the document library. The following columns are currently available in this document library:

Column (click to edit)	Type	Required
Title	Single line of text	
Project	Lookup	

- Create column
- Add from existing site columns
- Column ordering
- Indexed columns

Correct Answer:

Columns

A column stores information about each document in the document library. The following columns are currently available in this document library:

Column (click to edit)	Type	Required
Title	Single line of text	
Project	Lookup	

- Create column
- Add from existing site columns
- Column ordering
- **Indexed columns**

Section: [none]
Explanation

Explanation/Reference:

QUESTION 5

Question 5
You create a document reporting Web Part for the Marketing team auditors. You need to configure throttling for the Web Part.

Which code segment should you insert at line MA08?

A. spQuery.QueryThrottleMode = SPQueryThrottleOption.Strict;
B. spQuery.QueryThrottleMode = SPQueryThrottleOption.Override;
C. spQuery.QueryThrottleMode = SPQueryThrottleOption.Disable;
D. spQuery.QueryThrottleMode = SPQueryThrottleOption.Default;

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
From scenario:
Processing the queries can result in working with huge result sets. You must ensure that the information on this page is always available and that the queries are not throttled.

QUESTION 6
Question 6
You need to apply updates to only the sites that were created based on the Litware Team Site web template.

Which code segment should you use?

A.
```
string property = spWeb.GetProperty("litware.teamsite.wt_ID").ToString();
if (property == "WTLitwareTeamSite")
{
    ...
}
```

B.
```
string property = spWeb.GetProperty("WTLitwareTeamSite").ToString();
if (property == "litware.teamsite.wt_ID")
{
    ...
}
```

```
C. if (spWeb.WebTemplate == "WTLitwareTeamSite")
   {
       ...
   }
D. if (spWeb.Properties["litware.teamsite.wt_ID"] == "WTLitwareTeamSite")
   {
       ...
   }
```

Correct Answer: A
Section: [none]
Explanation

Explanation/Reference:
SPWeb.GetProperty - gets the value of a property with the specified key from the **AllProperties** property that is a key/value pair.

You're right - it's confusing. There's usually only one reason in SharePoint why things end up with totally non-common-sense names (see SPSite/ SPWeb), and that reason is backwards compatibility. SPWeb.AllProperties is the recommended property bag for a SPWeb object, while SPWeb.Properties is maintained for the benefit legacy code.

SPWeb.Properties is a StringDictionary, and doesn't support casing for keys/values (everything gets converted to lowercase), while SPWeb.AllProperties is a Hashtable, and supports a few other datatypes apart from strings (I believe ints and DateTimes are supported)

Instead of working directly with the SPWeb.Properties StringDictionary, SharePoint 2010 now provides four methods to manage properties:
- SPWeb.GetProperty(Object key)
- SPWeb.AddProperty(Object key, Object value)
- SPWeb.SetProperty(Object key, Object value)
- SPWeb.DeleteProperty(Object key)

http://henry-chong.com/sharepoint-2010-and-spweb-allproperties-spweb-properties

QUESTION 7
Question 7
You need to ensure that all of the solutions are deployed in the correct order.

How should you complete the relevant code?
(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.)

Select and Place:

Answer Area

Id

Name

SolutionId

SolutionName

SolutionDependency

SolutionDependencies

ActivationDependency

ActivationDependencies

Litware.Intranet.Core

Litware.Intranet.Templates

```xml
<?xml version="1.0" encoding="utf-8" ?>
<Solution xmlns="http://schemas.microsoft.com/sharepoint/">
    <                                    >
        <
                                            ="5ddead15-b99b-4948-bda0-ad1fa6970f9f"
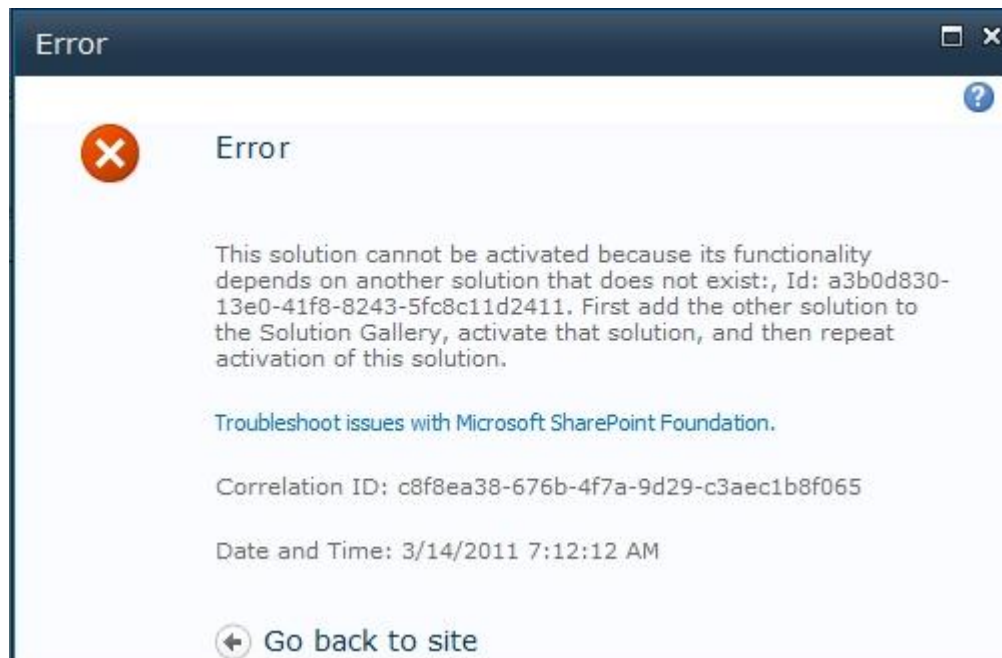                                            ="                              .wsp" />
    </                                  >
</Solution>
```

Correct Answer:

Answer Area

Id

Name

SolutionId

SolutionName

SolutionDependency

SolutionDependencies

ActivationDependency

ActivationDependencies

Litware.Intranet.Core

Litware.Intranet.Templates

```xml
<?xml version="1.0" encoding="utf-8" ?>
<Solution xmlns="http://schemas.microsoft.com/sharepoint/">
    < ActivationDependencies >
        < ActivationDependency
            SolutionId ="5ddead15-b99b-4948-bda0-ad1fa6970f9f"
            SolutionName =" Litware.Intranet.Core .wsp" />
    </ ActivationDependencies >
</Solution>
```

Section: [none]
Explanation

Explanation/Reference:
Scenario:
▪ Deployment of the package containing the Litware web templates Litware.Intranet.Templates.wsp must be prevented if the core package is not deployed in order to prevent deployment errors and eventually damage on the site structure itself.

In SharePoint 2007 you could already define feature activation dependencies when the availability of a certain feature was required before you could successfully activate a depending feature. This functionality almost worked perfectly, except that it does not deactivate depending features when a parent feature is deactivated. This has not changed in SharePoint 2010.

But in SharePoint 2010 we now have an additional feature: we can now define solution activation dependencies. It works almost similar as feature activation dependencies. When you deploy a solution with an activation dependency, SharePoint will check if this parent solution is already deployed. If not, you will get an error message. SharePoint 2010 will not deploy the parent solution for you. Solution dependencies are checked during deployment, not when adding to the solution store. If you retract a parent solution, SharePoint 2010 will not retract the depending child solutions.

When you try to deploy the child solution, which in my sample is the web part solution, without having deployed the parent solution containing a number of list definitions, you will get following error message.

```
Error                                              □ ✕
                                                    ❓

   ❌   Error

        This solution cannot be activated because its functionality
        depends on another solution that does not exist:, Id: a3b0d830-
        13e0-41f8-8243-5fc8c11d2411. First add the other solution to
        the Solution Gallery, activate that solution, and then repeat
        activation of this solution.

        Troubleshoot issues with Microsoft SharePoint Foundation.

        Correlation ID: c8f8ea38-676b-4f7a-9d29-c3aec1b8f065

        Date and Time: 3/14/2011 7:12:12 AM

        ⬅ Go back to site
```

The only problem is that it only mentions the solution ID. You can make it more user friendly by adding the SolutionName attribute, which is optional.

Package.package Package.package ✕ Schema.xml Schema.xml SubscriptionFunctions.cs SubscriptionWebPart.cs UnsubscribeWebPart.cs

```
                <SafeControl Assembly="BIWUG.SubscriptionWebPart, Version=1.0.0.0, Culture=neutral, PublicKeyToken=00e7453cd563ef32" Namespace="B
            </SafeControls>
        </Assembly>
    </Assemblies>
    <FeatureManifests>
        <FeatureManifest Location="BIWUG.SubscriptionWebPart_BIWUG Event Subscription Web Part Feature\Feature.xml" />
        <FeatureManifest Location="BIWUG.SubscriptionWebPart_BIWUG Event Unsubscribe Web Part Feature\Feature.xml" />
    </FeatureManifests>
</Solution>
```

⊟ Edit Options

Content in the manifest template will be merged with the XML generated by the Designer.

Manifest Template: (Open in XML Editor)

```
<?xml version="1.0" encoding="utf-8"?>
<Solution xmlns="http://schemas.microsoft.com/sharepoint/">
<ActivationDependencies>
<ActivationDependency SolutionId="a3b0d830-13e0-41f8-8243-5fc8c11d2411" SolutionName="BIWUG.ListDefinitions" />
</ActivationDependencies>
</Solution>
```

⊿ Design   ⊡ Advanced   ⊡ Manifest

The error message changes as follows:

Error ☐ ✕

❌ Error

This solution cannot be activated because its functionality
depends on another solution that does not
exist:BIWUG.ListDefinitions, Id: a3b0d830-13e0-41f8-8243-
5fc8c11d2411. First add the other solution to the Solution
Gallery, activate that solution, and then repeat activation of this
solution.

Troubleshoot issues with Microsoft SharePoint Foundation.

Correlation ID: eaa5aa96-4f94-4790-a8e9-1194662225c7

Date and Time: 3/14/2011 7:25:49 AM

⬅ Go back to site

https://karinebosch.wordpress.com/2011/03/14/solution-activation-dependencies-in-sharepoint-2010/

QUESTION 8
Question 8
You implement the dependency changes based on the requirements for the Litware web artifacts feature. When you deploy the
Litware.Intranet.Templates.wsp package, you receive an error message.

You need to ensure that the package deploys successfully.

What should you do?

A. Set the scope of the Litware web artifacts feature to SPSite.
B. Set the scope of the Litware web artifacts feature to SPFarm.
C. Set the Is Hidden option of the Litware web artifacts feature to False.
D. Set the Auto Activate in Central Admin parameter of the Litware web artifacts feature to True.

Correct Answer: C

Section: [none]
Explanation

Explanation/Reference:
Hidden Features cannot have activation dependencies.

http://msdn.microsoft.com/en-us/library/office/aa543162%28v=office.14%29.aspx

From scenario:
▪ The LitwareWebTemplateFeature feature contains the Litware Team Site web template. Templates with this title must be available in the group Litware in the template selection.
▪ The LitwareWebArtifacts **hidden** feature contains code required to run after the provisioning is completed.
▪ The LitwareWebArtifacts feature can be activated only if the LitwareWebTemplateFeature feature is activated as well.

QUESTION 9
Question 9
You need to scope the feature containing the Litware Team Site template. In the Feature Designer tool in Visual Studio 2012, which scope option should you select?
(To answer, select the appropriate scope from the drop-down list in the answer area.)

Hot Area:

Correct Answer:
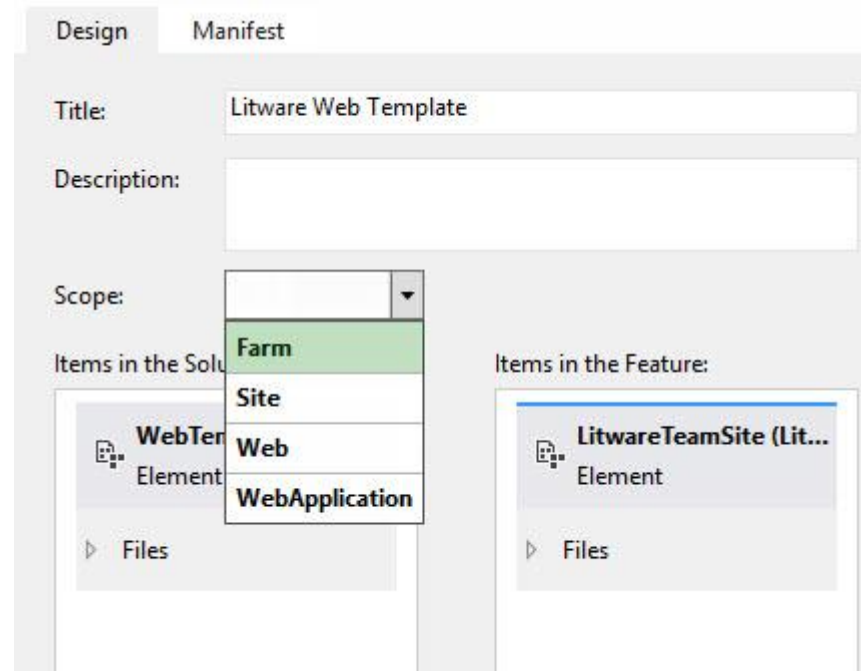
Section: [none]
Explanation

Explanation/Reference:
From scenario:
▪ As soon as the package containing the web template Litware.Intranet.Templates.wsp is deployed, the Litware Team Site template must be available for use in **all site collections**

http://whitepages.unlimitedviz.com/2010/10/how-to-build-a-site-collection-template-from-a-web-template-in-sharepoint-2010/

QUESTION 10
Question 10
You need to create a design package for the publishing sites.

What should you do?

A. Use SharePoint Designer to create master pages and a design package.

B. Use Visual Studio 2012 to create master pages and generate a design package.

C. Use display templates.

D. Use Design Manager.

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
Before you can use Design Manager, you need a design. You can create your own, or use a ready-made website template. A "design" is simply a group of files that implement the visual design of your site, most commonly:
▪ At least one HTML file that will be converted into a SharePoint master page
▪ One or more CSS files
▪ JavaScript files
▪ Images
▪ Other supporting files

http://msdn.microsoft.com/en-us/library/jj822363.aspx

From scenario:
It is essential that the new intranet supports a wide variety of mobile devices, platforms, and browsers.
The publishing site design is delivered as a set of **HTML files** (litwarepublishing.html), **CSS** (Litwarepublishing.css), and **image files** from the marketing company.
During the creation and application of the design package to the publishing site, SharePoint 2013 out-of-the-box capabilities must be used as much as possible to ensure simple design changes and to simplify the upgrade procedures. The publishing site must support rendering on a number of devices, starting with Windows Phone.

QUESTION 11
Question 11
You need to add the search box to the publishing site.

What should you do?

A. Generate a code snippet and paste it into the HTML file.

B. Edit the default.master master page and then add the search box control.

C. Add the Search Web Part to the Welcome page.

D. Edit the page layout.

Correct Answer: A
Section: [none]

Explanation

Explanation/Reference:

QUESTION 12
Question 12
You need to configure the publishing site to support the browser requirements.

From Site Settings, which option should you select first?
(To answer, select the appropriate option in the answer area.)

Hot Area:

Site Settings

Users and Permissions
People and groups
Site permissions
Site collection administrators
Site app permissions

Web Designer Galleries
Site columns
Site content types
Web parts
List templates
Master pages and page layouts
Themes
Solutions
Composed looks

Look and Feel
Design Manager
Master page
Title, description, and logo
Page layouts and site templates
Welcome Page
Device Channels
Tree view
Change the look
Import Design Package
Navigation
Image Renditions

Site Actions
Manage site features
Reset to site definition
Delete this site

Correct Answer:

Site Settings

Users and Permissions
People and groups
Site permissions
Site collection administrators
Site app permissions

Web Designer Galleries
Site columns
Site content types
Web parts
List templates
Master pages and page layouts
Themes
Solutions
Composed looks

Look and Feel
Design Manager
Master page
Title, description, and logo
Page layouts and site templates
Welcome Page
Device Channels
Tree view
Change the look
Import Design Package
Navigation
Image Renditions

Site Actions
Manage site features
Reset to site definition
Delete this site

Section: [none]
Explanation

Explanation/Reference:
From scenario:
▪ It is essential that the new intranet supports a wide variety of mobile devices, platforms, and browsers.
▪ The publishing site must support rendering on a number of devices, starting with Windows Phone.

Question Set 1

QUESTION 1
Question 1
You create a new Enterprise Content Management (ECM) project. You add a content type to the Visual Studio Project by using the Content Type Designer in Visual Studio 2012.

What will the designer-generated XML look like?
(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.)

Select and Place:

Answer Area

Column

Elements

FieldRef

FieldRefs

SiteColumn

```
<?xml version="1.0" encoding="utf-8" ?>
<                    xmlns= "http://schemas.microsoft.com/sharepoint/">
    <ContentType ID="0x0100C246DA2BB57D496D916BDD32671C57FA"
            Name="ContentTypeAB"
            Group="my contentTypes"
            Description="ContentTypeAB"
            Inherits="FALSE"
            Version="0" >
        <              >
        <              ID="{8fb95db3-0e69-4232-8827-c5b3c6b3533}"
                DisplayName="Site Column A" Required="TRUE" Name="SiteColumnA" />
        </             >
    </ContentType>
</              >
```

Correct Answer:

Answer Area

Column	
Elements	
FieldRef	
FieldRefs	
SiteColumn	

```xml
<?xml version="1.0" encoding="utf-8" ?>
< Elements   xmlns= "http://schemas.microsoft.com/sharepoint/">
    <ContentType ID="0x0100C246DA2BB57D496D916BDD32671C57FA"
        Name="ContentTypeAB"
        Group="my contentTypes"
        Description="ContentTypeAB"
        Inherits="FALSE"
        Version="0" >
        < FieldRefs >
            < FieldRef   ID="{8fb95db3-0e69-4232-8827-c5b3c6b3533}"
                DisplayName="Site Column A" Required="TRUE" Name="SiteColumnA" />
        </ FieldRefs >
    </ContentType>
</ Elements >
```

Section: [none]
Explanation

Explanation/Reference:
Target 1, target 5:
Elements Element (Field)
Top-level element in a Feature manifest file that contains Feature element declarations.
Example:
<Elements Id = "Text">
</Elements>

Target 2, 3, 4
The FieldRefs element contains a collection of FieldRef elements. The FieldRef element is a reference to a column defined elsewhere, either at the site or list level.

http://msdn.microsoft.com/en-us/library/office/ff512761(v=office.15).aspx

QUESTION 2
Question 2
You add a site column for an Enterprise Content Management (ECM) project by using the Site Column Designer in Visual Studio 2012.

What will the designer-generated XML look like?
(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.

Select and Place:

Answer Area

ContentTypeColumn

Elements

Field

ContentType

Type

```
<?xml version="1.0" encoding="utf-8" ?>
<                        xmlns="http://schemas.microsoft.com/sharepoint/">
  <
    ID="{9a904d11-b76d-4dba-a772-67b2383dd86f}"
    Name="SiteColumnB"
    DisplayName="Site Column B"
                        ="Text"
    Required="FALSE"
    Group="mySiteColumns">
  </               >
</               >
```

Correct Answer:

Answer Area

| ContentTypeColumn |

| Elements |

| Field |

| ContentType |

| Type |

```xml
<?xml version="1.0" encoding="utf-8" ?>
< Elements          xmlns="http://schemas.microsoft.com/sharepoint/">

  < Field

    ID="{9a904d11-b76d-4dba-a772-67b2383dd86f}"
    Name="SiteColumnB"
    DisplayName="Site Column B"

    Type          ="Text"

    Required="FALSE"
    Group="mySiteColumns">

  </ Field       >

</ Elements       >
```

Section: [none]
Explanation

Explanation/Reference:
http://msdn.microsoft.com/en-us/library/office/ff512761.aspx

Target 1, Target 5:
Elements Element (Field)
Top-level element in a Feature manifest file that contains Feature element declarations.
Example:
<Elements Id = "Text">
</Elements>

Example:
<?xml version="1.0" encoding="utf-8"?>
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">
  <Field ID="{060E50AC-E9C1-4D3C-B1F9-DE0BCAC300F6}" Name="Amount" Type="Currency" />
  </Field>
</Elements>

QUESTION 3
Question 3
You work on a SharePoint Enterprise Content Management (ECM) project. You develop the Litware Document Approval workflow that enables a group of people to review, approve, or reject documents and document changes. You need to assign the Litware Document Approval workflow to the Document content type.

How should you complete the relevant code?
(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.)

Select and Place:

Answer Area

```
"Tasks"

"WF History"

Lists["Documents"]

spWeb.Lists["Documents"]

CreateListAssociation

ContentTypes["Document"]

spWeb.Lists["WF History"]

CreateWebContentTypeAssociation
```

```
public override void FeatureActivated(SPFeatureReceiverProperties properties)
{
    SPWeb spWeb = (SPWeb)properties.Feature.Parent;
    var document = SPWeb._____;
    SPWorkflowTemplate wfTemplate = spWeb.WorkflowTemplates.GetTemplateByName(
        "Litware Document Approval", spWeb.Locale);
    var wfTaskList = _____;
    var wfHistoryList = _____;
    SPWorkflowAssociation wfAssociation =
        SPWorkflowAssociation._____
        (wfTemplate, "Document Approval", wfTaskList, wfHistoryList);
    document.WorkflowAssociations.Add(wfAssociation);
    document.Update();
}
```

Correct Answer:

Answer Area

"Tasks"

"WF History"

Lists["Documents"]

spWeb.Lists["Documents"]

CreateListAssociation

ContentTypes["Document"]

spWeb.Lists["WF History"]

CreateWebContentTypeAssociation

```
public override void FeatureActivated(SPFeatureReceiverProperties properties)
{
    SPWeb spWeb = (SPWeb)properties.Feature.Parent;

    var document = SPWeb. ContentTypes["Document"]  ;

    SPWorkflowTemplate wfTemplate = spWeb.WorkflowTemplates.GetTemplateByName(
        "Litware Document Approval", spWeb.Locale);

    var wfTaskList = "Tasks"  ;

    var wfHistoryList = "WF History"  ;

    SPWorkflowAssociation wfAssociation =

        SPWorkflowAssociation. CreateWebContentTypeAssociation

        (wfTemplate, "Document Approval", wfTaskList, wfHistoryList);
    document.WorkflowAssociations.Add(wfAssociation);
    document.Update();
}
```

Section: [none]
Explanation

Explanation/Reference:
SPWorkflowAssociation.**CreateWebContentTypeAssociation** method creates a workflow association that can then be added to a content type that is scoped at the website level.
public static SPWorkflowAssociation **CreateWebContentTypeAssociation**(
    SPWorkflowTemplate baseTemplate,
    string name,
    string taskListName,
    string historyListName
)

SPWorkflowAssociation.**CreateListAssociation** method creates a workflow association that can then be added to a list.
public static SPWorkflowAssociation **CreateListAssociation**(
    SPWorkflowTemplate baseTemplate,
    string name,
    SPList taskList,

SPList historyList
)

SPList.**WorkflowAssociations** property gets the collection of workflow association objects that represents all the workflows that are associated with the list.

http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.workflow.spworkflowassociation.createlistassociation.aspx
http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.workflow.spworkflowassociation.createwebcontenttypeassociation.aspx
http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.splist.workflowassociations.aspx

QUESTION 4
Question 4
A company uses SharePoint and Microsoft Dynamics CRM for collaboration and customer relationship management. The company uses Active Directory Domain Services (AD DS) for identity management. SharePoint and Microsoft Dynamics CRM are configured to use claims-based authentication. The company wants to authorize user access to SharePoint sites by using roles defined in Microsoft Dynamics CRM.

You create a custom claims provider. The provider adds a claim to the claim token for each role a user has in Microsoft Dynamics CRM. The provider also allows a site administrator to find and select roles from Microsoft Dynamics CRM to authorize user access. The custom claims provider must be created as a class library project to meet the unit testing requirements of the company.

The custom claims provider project is complete and ready to be packaged for deployment. You need to package and deploy the custom claims provider.

What should you do?
(To answer, drag the appropriate actions to the correct location or locations in the answer area. Each action may be used once, more than once, or not at all.)

Select and Place:

Actions

Answer Area

Create a Deployment project.

Create an empty SharePoint project as a farm solution.

Add a feature to the SharePoint project and set the feature scope to **Web**.

Add a feature to the SharePoint project, set the feature scope to **Farm**, and then specify the **ReceiverAssembly** and the **ReceiverClass** attributes in the Feature.xml file.

Add a class library project to the SharePoint project, and add code to implements claims.

In Solution Explorer, right-click the SharePoint project, choose **Add Reference**, and then select the signed assembly of the claims provider project.

In the SharePoint project inside Solution Explorer, double-click the **Package.package** node, add the assembly, and then set the Deployment Target as **GlobalAssemblyCache**.

In the SharePoint management shell, run the Windows PowerShell cmdlet **Add-SPSolution** and then run cmdlet **Install-SPSolution** with the **–GACDeployment** parameter.

Right-click the SharePoint project in Solution Explorer, choose **Package**, add then copy the .wsp file to the SharePoint server.

Right-click the SharePoint project in Solution Explorer, choose **Package**, add then copy the .wsp file to the SharePoint Solutions Gallery on the root site collection.

Get Assembly

Create Project

Specify Event Receiver Properties

Add Assembly to SharePoint Project

Generate Solution

Deploy Solution

Correct Answer:

Actions

Answer Area

Create a Deployment project.

Create an empty SharePoint project as a farm solution.

Add a feature to the SharePoint project and set the feature scope to **Web**.

Add a feature to the SharePoint project, set the feature scope to **Farm**, and then specify the **ReceiverAssembly** and the **ReceiverClass** attributes in the Feature.xml file.

Add a class library project to the SharePoint project, and add code to implements claims.

In Solution Explorer, right-click the SharePoint project, choose **Add Reference**, and then select the signed assembly of the claims provider project.

In the SharePoint project inside Solution Explorer, double-click the **Package.package** node, add the assembly, and then set the Deployment Target as **GlobalAssemblyCache**.

In the SharePoint management shell, run the Windows PowerShell cmdlet **Add-SPSolution** and then run cmdlet **Install-SPSolution** with the **–GACDeployment** parameter.

Right-click the SharePoint project in Solution Explorer, choose **Package**, add then copy the .wsp file to the SharePoint server.

Right-click the SharePoint project in Solution Explorer, choose **Package**, add then copy the .wsp file to the SharePoint Solutions Gallery on the root site collection.

Get Assembly	In Solution Explorer, right choose **Add Reference**, and of the claims provider proj
Create Project	Create an empty SharePoint
Specify Event Receiver Properties	Add a feature to the ShareP scope to **Farm**, and then spe the **ReceiverClass** attribu
Add Assembly to SharePoint Project	In the SharePoint project i click the **Package.package** set the Deployment Target a
Generate Solution	Right-click the SharePoint choose **Package**, add then c SharePoint server.
Deploy Solution	In the SharePoint managemen PowerShell cmdlet **Add-SPSo** **Install-SPSolution** with

Section: [none]
Explanation

Explanation/Reference:
http://msdn.microsoft.com/en-us/library/gg327818.aspx
http://msdn.microsoft.com/en-us/library/gg309548.aspx

*Niki:*5-Right-click and copy .wsp to root 6-Right-click and copy .wsp to SP server

abc (Germany, 13.06.2014): there was a new option to build the claim provider project and to take dll from project output folder

QUESTION 5
Question 5
A company uses SharePoint and Microsoft Dynamics CRM to manage customers. External users log in to the SharePoint site by using forms-based authentication.

The company needs to authenticate users by using a custom claims provider.

You have the following requirements:
1. Site administrators must be able to locate users in CRM.
2. Site administrators must be able to select users based on their roles in CRM.
3. Site administrators must be able to confirm that users exist in CRM.

You need to implement the custom claims provider. How should you complete the relevant code? (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.)

Select and Place:

Answer Area

public override bool SupportsHierarchy	Requirement 1 property:
protected override void FillResolve()	Requirement 1 method:
protected override void FillClaimsForEntity()	Requirement 2 property:
public override bool SupportsEntityInformation	Requirement 2 method:
public override bool SupportsResolve	Requirement 3 property:
protected override void FillSearch()	Requirement 3 method:
internal static string SupportsSearchResolve	
protected override void FillHierarchy()	
protected override void FillResolve()	
public override bool SupportsSearch	
protected override void CreateHierarchy()	

Correct Answer:

Answer Area

public override bool SupportsHierarchy	Requirement 1 property:
protected override void FillResolve()	Requirement 1 method:
protected override void FillClaimsForEntity()	Requirement 2 property:
public override bool SupportsEntityInformation	Requirement 2 method:
public override bool SupportsResolve	Requirement 3 property:
protected override void FillSearch()	Requirement 3 method:
internal static string SupportsSearchResolve	
protected override void FillHierarchy()	
protected override void FillResolve()	
public override bool SupportsSearch	
protected override void CreateHierarchy()	

Requirement 1 property: public override bool SupportsHierarchy

Requirement 1 method: protected override void FillHierarchy()

Requirement 2 property: public override bool SupportsSearch

Requirement 2 method: protected override void FillSearch()

Requirement 3 property: public override bool SupportsResolve

Requirement 3 method: protected override void FillResolve()

Section: [none]
Explanation

Explanation/Reference:
Requirement 1:
- FillHierarchy.SupportsHierarchy property - when implemented in a derived class, determines whether the claims provider supports hierarchical display.
- FillHierarchy - if you want to display hierarchy on the left pane of the claims picker, you must implement the
FillHierarchy method and the SupportsHierarchy property in the SPClaimProvider class.

Requirement 2:
FillSearch.SupportSearch - if you want to be able to search for claims in the People Picker control, you must implement the Fillsearch method and Microsoft.SharePoint.Administration.Claims.SupportSearch property. The SupportsSearch must return true.

Requirement 3: FillResolve.SupportResolve
A People Picker with claims picking functionality is sometimes referred to as a claim picker. If you want to be able to resolve claims by using the type-in control of the claims picker, you must implement this method and implement the **SupportResolve()** property to return true.

Incorrect:
FillClaimsForEntity.SupportsEntityInformation - when you include additional claims in a user's security token, you are augmenting claims. If you want to augment claims, you must implement the FillClaimsForEntity method. In addition, you must also set the SupportsEntityInformation property to true in the SPClaimProvider class. In order for this method to be invoked, the SupportsEntityInformation must return true.

QUESTION 6
Question 6
You develop a SharePoint app to access data contained in a hosted SharePoint site.

You need to authorize the app to access the list items in a custom list on the host website.

How should you complete the relevant code?
(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.)

Select and Place:

Answer Area

| Uri |

| ServiceHost |

| SecurityTokenContext |

| TokenHelper |

| GetAccessToken |

| contextTokenStr |

```
[                    ].TrustAllCertificates();

string [                    ] =

       [                    ].GetContextTokenFromRequest(Request);

if (contextTokenStr != null)
{

    contextToken = [                    ].ReadAndValidateContextToken(

            [                    ], Request.Url.Authority);

    sharepointUrl = new Uri(RequestForwarder.QueryString["SPHostUrl"]);

    accessToken = TokenHelper.[                    ](

        contextToken, sharepointUrl.Authority).AccessToken;
    Button1.CommandArgument = accessToken;
}
```

Correct Answer:

Answer Area

Uri	
ServiceHost	
SecurityTokenContext	
TokenHelper	
GetAccessToken	
contextTokenStr	

```
TokenHelper          .TrustAllCertificates();

string  contextTokenStr   =

        TokenHelper           .GetContextTokenFromRequest(Request);

if (contextTokenStr != null)
{

    contextToken =  TokenHelper          .ReadAndValidateContextToken(

            contextTokenStr     , Request.Url.Authority);

    sharepointUrl = new Uri(RequestForwarder.QueryString["SPHostUrl"]);

    accessToken = TokenHelper.  GetAccessToken      (

        contextToken, sharepointUrl.Authority).AccessToken;
    Button1.CommandArgument = accessToken;
}
```

Section: [none]
Explanation

Explanation/Reference:
7.3???

TokenHelper.TrustAllCertificates
If you are using Visual Studio 2012, it adds 'TrustAllCertificates' in TokenHelper.cs by default.

Tokenhelper.GetContextTokenFromRequest

Tokenhelper.ReadAndValidateContextToken
Example:
string contextTokenString = TokenHelper.GetContextTokenFromRequest(Page.Request);
SharePointContextToken contextToken = TokenHelper.ReadAndValidateContextToken(contextTokenString, Request.Url.Authority);

TokenHelper.GetAccessToken

Example:
//Get user+app access token.
string accessToken = TokenHelper.GetAccessToken(contextToken, sharepointUrl.Authority).AccessToken;

QUESTION 7
Question 7
Northwind Traders uses Microsoft Office 365 to share customer information between internal and external users. Northwind Traders plans to allow external sales managers to manage customers on the Office 365 site by providing a custom SharePoint autohosted app. The custom web application will be hosted on Microsoft Azure.

You develop the autohosted app that allows all users on Office 365 to be able to read and write data in a SharePoint list from an ASP.NET web application.

You need to ensure that the custom web application will authenticate itself, get access tokens from the Microsoft Azure Access Control Service (ACS), and read to and write from a SharePoint list.

Which code segments should you include 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.)

Select and Place:

Answer Area

Options (left column):

```
TokenHelper.GetContextTokenFromRequest(Request)
```

```
TokenHelper.GetClientContextWithAuthorizationCode(
    contextTokenString, Request.Url.Authority)
```

```
TokenHelper.ReadAndValidateContextToken(
    contextTokenString, Request.Url.Authority)
```

```
TokenHelper.GetS2SClientContextWithWindowsIdentity(
    sharepointUrl, WindowsIdentity.GetCurrent())
```

```
TokenHelper.GetClientContextWithAccessToken(
    sharepointUrl.ToString(), accessToken)
```

```csharp
SharePointContextToken contextToken;
string AccessToken;
Uri sharepointUrl;

protected void Page_Load(object sender, EventArgs e)
{
    string contextTokenString = [                    ]

    if (contextTokenString != null)
    {
        contextToken = [                    ]

        sharepointUrl = GetModifiedAppWebUrl();
        accessToken = TokenHelper.GetAccessToken(
            contextToken, sharepointUrl.Authority).AccessToken;
        Button1.CommandArgument = accessToken;
    }
}
protected void Button1Click(object sender, EventArgs e)
{
    string accessToken = ((Button)sender).CommandArgument;
    if (IsPostBack)
    {
        sharepointUrl = GetModifiedAppWebUrl();
    }
    using (var clientContext = [                    ]

    {
        Microsoft.SharePoint.Client.List Customers =
            clientContext.Web.Lists.GetByTitle("Customers");
        // Code Add New Item to Customers List
        clientContext.ExecuteQuery();
        // Bind List Items to Grid
    }
}
private Uri GetModifiedAppWebUrl()
```

Correct Answer:

Answer Area

Options:

```
TokenHelper.GetContextTokenFromRequest(Request)
```

```
TokenHelper.GetClientContextWithAuthorizationCode(
    contextTokenString, Request.Url.Authority)
```

```
TokenHelper.ReadAndValidateContextToken(
    contextTokenString, Request.Url.Authority)
```

```
TokenHelper.GetS2SClientContextWithWindowsIdentity(
    sharepointUrl, WindowsIdentity.GetCurrent())
```

```
TokenHelper.GetClientContextWithAccessToken(
    sharepointUrl.ToString(), accessToken)
```

Code:

```csharp
SharePointContextToken contextToken;
string AccessToken;
Uri sharepointUrl;

protected void Page_Load(object sender, EventArgs e)
{
    string contextTokenString = TokenHelper.GetContextTokenFromRequest(Re

    if (contextTokenString != null)
    {
        contextToken = TokenHelper.ReadAndValidateContextToken(
                            contextTokenString, Request.Url.Authority)

        sharepointUrl = GetModifiedAppWebUrl();
        accessToken = TokenHelper.GetAccessToken(
            contextToken, sharepointUrl.Authority).AccessToken;
        Button1.CommandArgument = accessToken;
    }
}
protected void Button1Click(object sender, EventArgs e)
{
    string accessToken = ((Button)sender).CommandArgument;
    if (IsPostBack)
    {
        sharepointUrl = GetModifiedAppWebUrl();
    }
    using (var clientContext = TokenHelper.GetClientContextWithAccessToke
                                    sharepointUrl.ToString(), accessToken)
    {
        Microsoft.SharePoint.Client.List Customers =
            clientContext.Web.Lists.GetByTitle("Customers");
        // Code Add New Item to Customers List
        clientContext.ExecuteQuery();
        // Bind List Items to Grid
    }
}
private Uri GetModifiedAppWebUrl()
```

Section: [none]
Explanation

Explanation/Reference:
Example (Target1, Target2) (TokenHelper.GetContextTokenFromRequest, TokenHelper.ReadAndValidateContextToken)

```
// The Page_load method fetches the context token and the access token.
// The access token is used by all of the data retrieval methods.
protected void Page_Load(object sender, EventArgs e)
{
  string contextTokenString = TokenHelper.GetContextTokenFromRequest(Request);
  if (contextTokenString != null)
  {
    contextToken = TokenHelper.ReadAndValidateContextToken(contextTokenString, Request.Url.Authority);
    // etc,
  }
```

Example (Target 3, TokenHelper.GetClientContextWithAccessToken):

```
// This method retrieves information about the host web by using the CSOM.
private void RetrieveWithCSOM(string accessToken)
{
  if (IsPostBack)
  {
    sharepointUrl = new Uri(Request.QueryString["SPHostUrl"]);
  }
  ClientContext clientContext = TokenHelper.GetClientContextWithAccessToken(sharepointUrl.ToString(), accessToken);
}
```

QUESTION 8
Question 8
Adventure Works uses SharePoint for managing project-related documents, information sharing, and tasks management. You develop a SharePoint-hosted app named TasksViewer and deploy it to the Corporate Catalog Site. This app is used only by the Project Management Office (PMO) group. Only users in the PMO group have permission to view and add this app to various project sites. The Adventure Works IT department creates a security group in Active Directory for the PMO.

Currently all of the apps are visible to the Everyone group. You need to ensure that only users in the PMO group can see the app.

Which five actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area
Remove the Everyone group from the permissions and then add the PMO group with Read permission.	
From Central Administration, select the **Apps** link and then open the Corporate Catalog site.	
From Quick Launch, select the **Apps for SharePoint** link.	
From Quick Launch, select the **Apps for office** link.	
Open the context menu, select the **Ellipsis** button, select the **Shared with** link, and then select the **Advanced** link.	
Select the **Stop Inheriting Permissions** button.	

Correct Answer:

Actions

Answer Area

From Quick Launch, select the **Apps for Office** link.

From Central Administration, select the **Apps** link and then open the Corporate Catalog site.

From Quick Launch, select the **Apps for SharePoint** link.

Open the context menu, select the **Ellipsis** button, select the **Shared With** link, and then select the **Advanced** link.

Select the **Stop Inheriting Permissions** button.

Remove the Everyone group from the permissions and then add the PMO group with Read permission.

Section: [none]
Explanation

Explanation/Reference:
Anon/Javier/Gwen/Eleonora: Answer

Answer Area

Remove the Everyone group from the permissions and then add the PMO group with Read permission.

Open the context menu, select the **Ellipsis** button, select the **Shared With** link, and then select the **Advanced** link.

From Quick Launch, select the **Apps for Office** link.

Select the **Stop Inheriting Permissions** button.

From Central Administration, select the **Apps** link and then open the Corporate Catalog site.

From Quick Launch, select the **Apps for SharePoint** link.

QUESTION 9
Question 9
A web application that listens on port 80 has been created for Internet users to access your company's SharePoint site.

Your company requires anonymous users to authenticate before they post content.

You need to change the permissions that are assigned to unauthenticated users. On the Manage web applications page in Central Administration, which option should you select? (To answer, select the appropriate menu item in the answer area.)

Hot Area:

Answer Area

Authentication Providers	Self-Service Site Creation	Blocked File Types	User Policy	Anonymous Policy	Permission Policy
		User Permissions			
		Web Part Security			
	Security			Policy	

Correct Answer:

Answer Area

![Answer Area ribbon showing Security group with Authentication Providers, Self-Service Site Creation, Blocked File Types, User Permissions, Web Part Security and Policy group with User Policy, Anonymous Policy (highlighted green), Permission Policy]

Section: [none]
Explanation

Explanation/Reference:
For the unauthenticated users use the Anonymous policy.

QUESTION 10
Question 10
A web application that listens on port 80 has been created for Internet users to access your company's SharePoint site. The web application uses claims-based authentication.

Users report that they are prompted for credentials when they access the site in their browser.

You need to enable anonymous access. On the Manage web applications page in Central Administration, which option should you select? (To answer, select the appropriate menu item in the answer area.)

Hot Area:

Answer Area

![Answer Area ribbon showing Security group with Authentication Providers, Self-Service Site Creation, Blocked File Types, User Permissions, Web Part Security and Policy group with User Policy, Anonymous Policy, Permission Policy]

Correct Answer:

Answer Area

Section: [none]
Explanation

Explanation/Reference:

All: Answer "Permission Policy"
KL (Hong Kong, 09.12.14): The answer is Authentication Providers.
Mateusz (Poland, 12.12.14): Authentication providers

QUESTION 11
Question 11
You have a large list that contains more than 5,000 list items.

You need to iterate through the list by using the Content Iterator to avoid getting an exception.

How should you complete the relevant code?
(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.)

Select and Place:

Answer Area

```
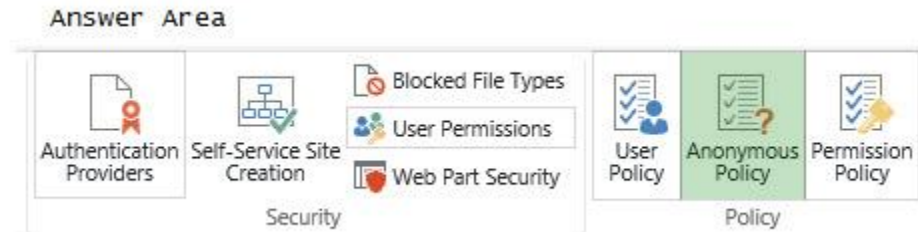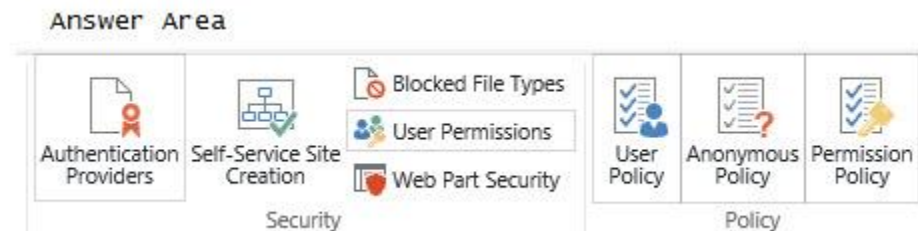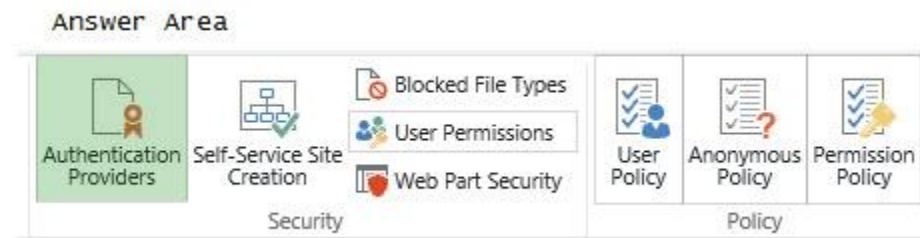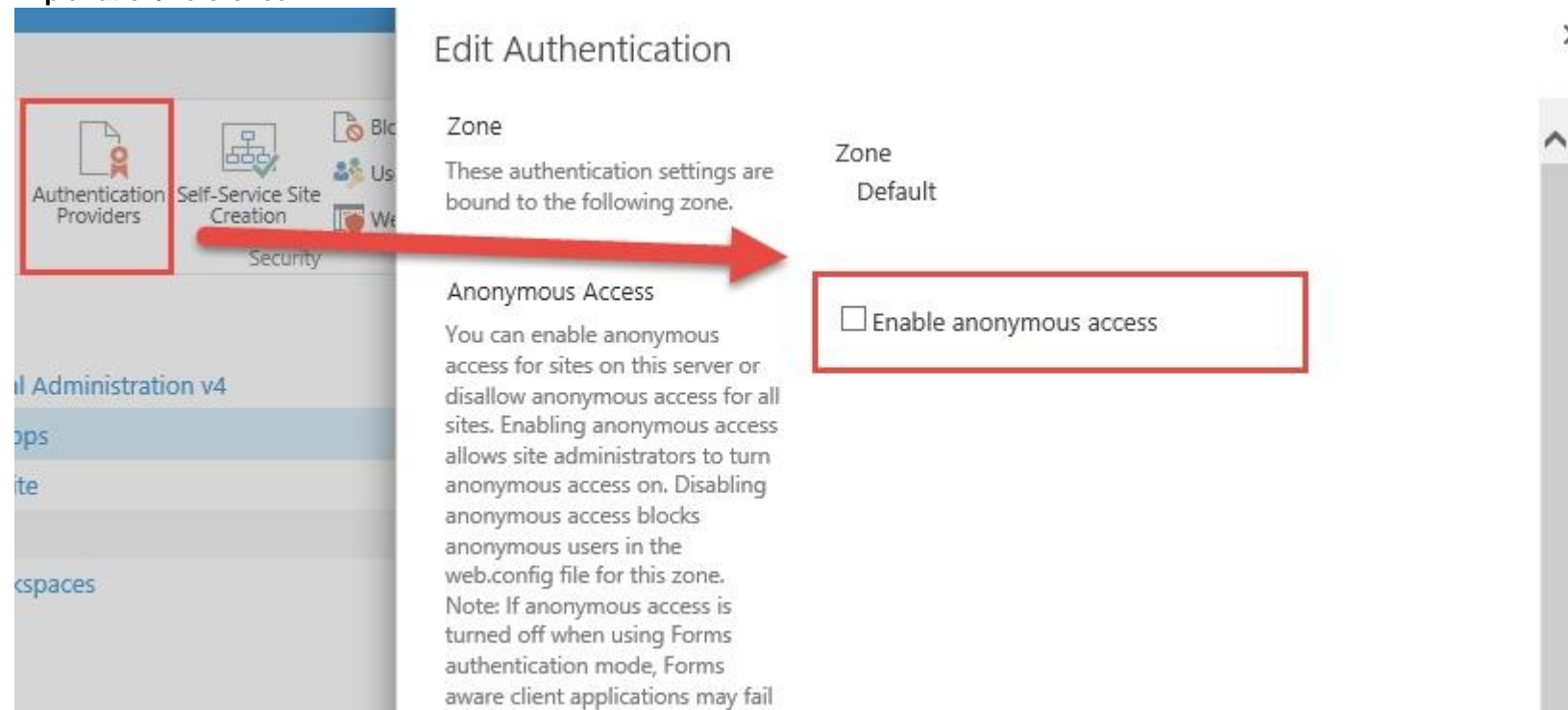query1

SPList

SPListItem

SPContext

ContentIterator

ProcessListItems
```

```
string [          ] = "<View/>";

[          ] iterator = new [          ]();

SPQuery listQuery = new SPQuery();

listQuery.Query = [          ];

SPList list = [          ].Current.Web.Lists["vIndividualCustomer"];

iterator.[          ](
    list, listQuery, ProcessItem, ProcessError);
```

Correct Answer:

Answer Area

```
string  query1          = "<View/>";

ContentIterator    iterator = new  ContentIterator   ();

SPQuery listQuery = new SPQuery();

listQuery.Query = query1          ;

SPList list = SPContext          .Current.Web.Lists["vIndividualCustomer"];

iterator. ProcessListItems   (

    list, listQuery, ProcessItem, ProcessError);
```

Options:
- query1
- SPList
- SPListItem
- SPContext
- ContentIterator
- ProcessListItems

Section: [none]
Explanation

Explanation/Reference:
(Target 2, 3) ContentIterator
Provides helper methods that ensure lists can be queried while regulating the amount of data being transferred. This is especially important for queries on large lists or Web farms so that the load put on the database is not excessive.

(Target 5) SPContext
Use the SPContext class to return context information about such objects as the current Web application, site collection, site, list, or list item.

(Target 6) iterator.ProcessListItems
ContentIterator.ProcessListItems method (SPList, SPQuery, Boolean, ContentIterator.ItemProcessor, ContentIterator.ItemProcessorErrorCallout)
Processes list items.

ContentIterator class provides methods to iterate list items, lists, sites to regulate the amount of data that is transferred (i.e., to avoid throwing a SPQueryThrottledException).

https://msdn.microsoft.com/EN-US/library/office/microsoft.office.server.utilities.contentiterator.aspx

QUESTION 12
Question 12
The Contoso SharePoint on-premise intranet portal stores content in 50 site collections.

Contoso must display all content tagged with a metadata term on the main page of the portal.

You need to display all documents with the metadata term without using any custom code.

Which technology should you use?

A. Content Query Web Part (CQWP)
B. Content Search Web Part (CSWP)
C. TaxonomySession
D. CamlQuery
E. SPQuery with Site Collection set to the portal's main page site collection
F. SPSiteDataQuery

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
Not A: The ContentByQueryWebPart, commonly referred to as the Content Query Web Part, is a part of the Enterprise Content Management (ECM) functionality in Microsoft Office SharePoint Server. It aggregates and displays list items within a site hierarchy. The Content Query Web Part has the following limitations:
▪ You can only aggregate data within **a single site collection**.
▪ You can only aggregate list information.

B: In a simplified world, here's how you can decide between the two:
▪ Use the CQWP when you have a limited amount of content, your query is simple, and you don't expect your content to grow much in the future.
▪ Use the CSWP in all other scenarios when you want to show content that is based on a query.

The Content Search Web Part (CSWP) is a Web Part introduced in SharePoint 2013 that uses various styling options to display dynamic content on SharePoint pages.

Not C: For TaxonomySession you would have to write code.

Not D: The CamlQuery class just specifies a query on a list.

All: Answer A
arszenik (Poland, 02.12.14): Content Search WebPart (Content Query WebPart is not cross site collection)
KL (Hong Kong, 09.12.14): My answer is Content Search Web Part.
Mateusz (Poland, 12.12.14): Content Search Web Part. CQWP is wrong because it works within a site collection. We need to gather data from different site collections.

QUESTION 13
Question 13
You create a solution to access data contained in SharePoint by using a client-side object model (CSOM).

How should you complete the relevant code?
(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.

Select and Place:

Answer Area

| clientContext |
| collListItem |
| ExecuteQuery |
| Load |
| ExecuteQueryAsync |

```
ClientContext [          ] = new ClientContext(siteUrl);

clientContext.Credentials = new NetworkCredential("userid", "password", "domain");
List oList = clientContext.Web.Lists.GetByTitle("Dev");
CamlQuery q = new CamlQuery();
q.ViewXml = @"<View />";

ListItemCollection [          ] = oList.GetItems(q);

clientContext.[          ] (collListItem);

clientContext.[          ] ();

foreach (ListItem oListItem in collListItem)
{
    ...
}
```

Correct Answer:

Answer Area

```
clientContext

collListItem

ExecuteQuery

Load

ExecuteQueryAsync
```

```
ClientContext  clientContext       = new ClientContext(siteUrl);

clientContext.Credentials = new NetworkCredential("userid", "password", "domain");
List oList = clientContext.Web.Lists.GetByTitle("Dev");
CamlQuery q = new CamlQuery();
q.ViewXml = @"<View />";

ListItemCollection  collListItem       = oList.GetItems(q);

clientContext.  Load        (collListItem);

clientContext.  ExecuteQuery  ();

foreach (ListItem oListItem in collListItem)
{
    ...
}
```

Section: [none]
Explanation

Explanation/Reference:

QUESTION 14
Question 14
You need to retrieve data about all the lists in a site by using the REST (Representational State Transfer) API.

How should you complete the relevant code?
(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.

Select and Place:

Answer Area

| "POST" | ```
string siteUrl = "http://server.sites.site";
HttpWebRequest endpointRequest =

    (HttpWebRequest)HttpWebRequest.Create(siteUrl + [          ]);

endpointRequest.Credentials = new NetworkCredential("userid", "password", "domain");

endpointRequest.Method = [          ];

endpointRequest.Accept = "application/json;odata=verbose";
HttpWebResponse endpointResponse = (HttpWebResponse)endpointRequest.GetResponse();
``` |
"GET"	
"/_api/web/lists"	
"/_api/web/AllLists"	
"/_vti_bin/web/lists"	

Correct Answer:

Answer Area

| "POST" | ```
string siteUrl = "http://server.sites.site";
HttpWebRequest endpointRequest =

    (HttpWebRequest)HttpWebRequest.Create(siteUrl + "/_api/web/lists" );

endpointRequest.Credentials = new NetworkCredential("userid", "password", "domain");

endpointRequest.Method = "GET" ;

endpointRequest.Accept = "application/json;odata=verbose";
HttpWebResponse endpointResponse = (HttpWebResponse)endpointRequest.GetResponse();
``` |
"GET"	
"/_api/web/lists"	
"/_api/web/AllLists"	
"/_vti_bin/web/lists"	

Section: [none]
Explanation

Explanation/Reference:
HttpWebRequest "/_api/web/lists"
Example:

The code in the following example shows you how to request a JSON representation of all of the lists in a site by using C#. It assumes that you have an OAuth access token that you are storing in the accessToken variable.

```
HttpWebRequest endpointRequest = (HttpWebRequest)HttpWebRequest.Create(sharepointUrl.ToString() + "/_api/web/lists");
endpointRequest.Method = "GET";
// etc.
```

Reference: How to: Complete basic operations using SharePoint 2013 REST endpoints

QUESTION 15
Question 15
A company has a SharePoint farm that has the following configuration:
▪ SPWFE1 and SPWFE2 are configured as front-end web servers.
▪ SPAPP1 and SPAPP2 are configured as application servers.

New servers will be added to the farm.

You implement a solution that contains a custom navigation provider. You need to register a custom navigation provider by using the least amount of administrative effort. What should you do?

A. Create a web.solutionname.xml file in the \CONFIG directory and run the copyappbincontent stsadm command.
B. Edit the ApplicationHost.config file on each SharePoint server.
C. Edit the web.config file for the web application on all SharePoint servers.
D. Use the SPWebConfigModification class.

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
The new site map provider is registered in the Web.config file of the current Web application. It is associated with the symbolic name **CategorySiteMapProvider** that is referenced by the site map's ASP.NET control.

The **WebFeatureReceiver** class defines the modification to the Web.config using an instance of **SPWebConfigModification**.

```
public WebFeatureReceiver()
{
    sPWebConfigModification = new
        SPWebConfigModification("add[@name=\"CategorySiteMapProvider\"]",
        "configuration/system.web/siteMap/providers");
    sPWebConfigModification.Owner = GetType().Assembly.GetName().ToString();
    sPWebConfigModification.Type =
        SPWebConfigModification.SPWebConfigModificationType.EnsureChildNode;
    sPWebConfigModification.Value = @"<add name=""CategorySiteMapProvider""
     description=""Provider for category navigation using Business Data Catalog""
     type=""Contoso.PartnerPortal.ProductCatalog.Navigation.BusinessDataCatalogSiteMapProvider,
     Contoso.PartnerPortal.ProductCatalog, Version=1.0.0.0, Culture=neutral, PublicKeyToken=0dcd9137292eac97"" />";
}
```

https://msdn.microsoft.com/en-us/library/ff649108.aspx

QUESTION 16
Question 16
You are developing a SharePoint solution for a company. You create one site collection for each department. Sites may use data from internal or external web service endpoints.

You are developing an application that allows site owners to add or change web service endpoints.

The application must run in the context of the site owner.

You need to complete the application.

What should you do?

A. Use the SPWebConfigModification class to add a list of web service endpoint URLs to the web.config file.
B. Add a property named WebSvcEndpoint to the SPSite.Properties property bag. Store a web service endpoint URL as a value.
C. Add a property named WebSvcEndpoint to the SPWeb.AllProperties property bag. Store a web service endpoint URL as a value.
D. Add a list of web service endpoint URLs to the SPFarm.Properties hashtable.

Correct Answer: A
Section: [none]
Explanation

Explanation/Reference:
The SPWebConfigModification class holds modifications that are made to the web.config.

Each endpoint supported by your WCF service application must be defined in the web.config settings for the application.

https://msdn.microsoft.com/en-us/library/office/ee535060.aspx

QUESTION 17
Question 17
A company uses SharePoint for internal collaboration. SharePoint is deployed on a server farm with a single front-end server, a single application server, and a dedicated database server.

You review existing Web Parts that read from and write to SharePoint lists. You find the following code in one of the utility classes and notice memory leaks in the method.

```
private void ChangeSiteDescription(string siteUrl, string newSiteDescription)
{
    SPSite siteCollection = null;
    try
    {
        siteCollection = new SPSite(siteUrl);
        using (SPWeb site = siteCollection.RootWeb)
        {
            site.Description = newSiteDescription;
            site.Update();
        }
    }
    catch (Exception)
    {
        siteCollection.Close();
    }
}
```

You need to ensure that there are no memory leaks in the method. What should you do?

A. Add a finally statement and include site.Dispose().
B. Add site.Dispose() to the catch statement.
C. Add a finally statement and include siteCollection.Dispose();
D. Add siteCollection.Dispose() to the catch statement.

Correct Answer: C

Section: [none]
Explanation

Explanation/Reference:
SPSite.Close() closes the site collection and releases resources. Calling the **Close** method has the same effect as calling the **Dispose** method.

arszenik (Poland, 02.12.14): Answer D

QUESTION 18
Question 18
Contoso. Ltd. uses SharePoint for document sharing, task management, and workflows. Contoso, Ltd has a SharePoint portal with a URL of intranet.contoso.com. The portal has 5,000 subsites. It is used by 50,000 users.

You develop a custom web level feature that allows users to see their tasks from every website on the portal.

You need to use a Windows PowerShell script to enable the web level feature in the subsites without adversely impacting the performance of the server.

Which values should you include to complete the script? (To answer, drag the appropriate values to the correct targets in the answer area. Each value may be used once, more than once, or not at all.)

Select and Place:

Answer Area

$siteScope = Get-SPSiteAdministration	
$webScope = Start-SPAssignment	
$webScope = End-SPAssignment	
Stop-SPAssignment $webScope	
$siteScope = End-SPAssignment	
Stop-SPAssignment $siteScope	
Stop-SPServices $siteScope	
$siteScope = Start-SPAssignment	

```
[                    ]

foreach ($site in ($siteScope | Get-SPSite "http://intranet.contoso.com"))
{
    [                    ]

        $web = $webScope | Get-SPWeb $site.RootWeb.Url
    [                    ]
}

[                    ]
```

Correct Answer:

Answer Area

Options	Answer Area
$siteScope = Get-SPSiteAdministration	$siteScope = Start-SPAssignment
$webScope = Start-SPAssignment	
$webScope = End-SPAssignment	foreach ($site in ($siteScope | Get-SPSite "http://intranet.contoso.com"))
Stop-SPAssignment $webScope	{
$siteScope = End-SPAssignment	$webScope = Start-SPAssignment
Stop-SPAssignment $siteScope	$web = $webScope	Get-SPWeb $site.RootWeb.Url
Stop-SPServices $siteScope	Stop-SPAssignment $webScope
$siteScope = Start-SPAssignment	}
	Stop-SPAssignment $siteScope

Section: [none]
Explanation

Explanation/Reference:
Example:
Advanced Assignment
Objects are assigned to named stores for disposal. You can dispose of objects by using the -Identity parameter with the Stop-SPAssignment command.

$siteScope = Start-SPAssignment
foreach($site in ($siteScope | Get-SPSite "http://server/*"))
{
  $webScope = Start-SPAssignment
  $web = $webScope | Get-SPWeb $site.RootWeb.Url
  $web.Title = "Greetings from PowerShell"
  $web.Update()
  Stop-SPAssignment $webScope
}
Stop-SPAssignment $siteScope

Regardless of the level used, all objects are disposed of when the PowerShell runspace is closed.

QUESTION 19
Question 19
You have a SharePoint site with one site collection and several subwebs. You develop a feature that installs an event receiver on a list.

The event receiver must send a notification by email when information is modified. Not all subwebs require this functionality.

You need to set the feature scope. From the Add New Feature dialog window, which scope should you use?
(To answer, select the appropriate scope in the answer area.)

Hot Area:

Correct Answer:

Section: [none]
Explanation

Explanation/Reference:
arszenik (Poland, 02.12.14): Answer Farm

QUESTION 20
Question 20
You troubleshoot the sandbox solutions that your team builds. You need to redeploy a sandbox solution. You also need to identify which process must be debugged.

Where should you redeploy the solution, and which process should you debug?
(To answer, drag the appropriate statements to the correct location or locations in the answer area. Each statement 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:

Answer Area

Farm		Process to debug:	
w3wp.exe		Location where solution is deployed:	
Solution Gallery			
Central Administration			
SPUCWorkerProcess.exe			

Correct Answer:

Answer Area

Farm		Process to debug:	SPUCWorkerProcess.exe
w3wp.exe		Location where solution is deployed:	Solution Gallery
Solution Gallery			
Central Administration			
SPUCWorkerProcess.exe			

Section: [none]
Explanation

Explanation/Reference:

QUESTION 21
Question 21
A user deploys a sandbox solution. The user cannot activate the solution.

You need to ensure that the user can activate the solution.

What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

A. Grant permission to the user to activate the solution.
B. Grant permission to the user to execute the solution.
C. Configure a local mode load-balancing scheme.
D. Stop the Microsoft User Code Host Service.
E. Configure a remote mode load-balancing scheme.
F. Start the Microsoft SharePoint Foundation Sandboxed Code Service.
G. Start the PerformancePoint Services.

Correct Answer: AF
Section: [none]
Explanation

Explanation/Reference:
A: Need to activate the feature that provisions the files.

siteCollection.Features.Add([guid_of_your_feature])

F: To enable sandboxed solutions by using Central Administration
1. Verify that you have the following administrative credentials:
2. On the home page of the Central Administration Web site, in the System Settings section, click Manage services on server.
3. On the Services on Server page, in the Server box, select the server on which you want to enable sandboxed solutions.
4. In the Microsoft SharePoint Foundation Sandboxed Code Service row, in the Action column, click Start.

http://msdn.microsoft.com/en-us/library/ff798382.aspx

Sam/Angie1/Anon/Niki/Angie2/Alberta/Javier/Ronnie/Gwen/Eleonora/MsExam(E8): Answer BF
*Noam(E5,E25):*Answer BC
abc (Germany, 13.06.2014): I think the correct is to set permission to activate solution.

QUESTION 22
Question 22
Adventure Works uses a SharePoint publishing site for an external website at www.adventureworks.com. The user interface is implemented by using HTML5, CSS 3, and JavaScript.

You need to ensure that the site designers have an efficient way to create and modify the JavaScript files.

What should you do?

A. Open the site in SharePoint Designer. From All Files, double-click the _cts folder and then select the MasterPages folder. Create a folder. Modify the JavaScript files by using Microsoft Notepad.
B. Copy all the JavaScript files to a document library and modify them directly by using Microsoft Notepad.
C. Open the site in SharePoint Designer. From Master Pages select the JavaScript files to modify them.
D. Set up a mapped network drive in Design Manager. Open the mapped drive and create a folder. Modify the JavaScript files by using Microsoft Notepad.

Correct Answer: C
Section: [none]
Explanation

Explanation/Reference:
5.1.????

Mateusz (Poland, 12.12.14): From the Dump I'd go with C but on the exam I had another answer: In SharePoint Designer open _catalogs, then master pages, create new folder and use SPD to modify javascript files. I went with this option because I think that the key word here is using SPD to modify files, not Notepad.

QUESTION 23
Question 23
Adventure Works uses SharePoint to store product and order information. Product managers visit the Products list to see the status of each product. They request a feature that will allow them to easily see the recent and old product orders without opening the Products list. The products orders page is located at /sitepages/productorders.aspx, and the product order history page is located at /sitespages/productordershistory.aspx. Both pages require a query string parameter named ProductID.

You need to add custom actions to the Products list by using the least amount of administrative effort. What should you do?

A. Add an empty element to the SharePoint project. Add a <CustomAction> tag, set the Location element to EditControlBlock, and then use the <UrlAction> tag for a redirect to the custom page.
B. Create a Windows Application and add a reference to Microsoft.SharePoint.Portal.CustomActions.dll and use the SPCustomActions class to add a custom action.
C. Open the site in SharePoint Designer. Create a custom List Item Display Template and then apply it to the Products List ViewWeb Part.
D. Create a visual Web Part. Use a grid view with a template column and hyperlink, and databind the Products list. Add the Web Part to the allItems.aspx page of the Products list.
E. In SharePoint Designer on a List dashboard create a custom action and use Navigate to URL option.

Correct Answer: E
Section: [none]
Explanation

Explanation/Reference:
Trish (Singapore, 30.01.2014): Option D wasn't there.This is wrong I believe
abc (Germany, 13.06.2014): the option to add custom action for ECB and to use visual webpart was not present there, there were new options to add content editor webpart + javascript or to use designer to add navigate url.
Duckl (Germany, 27.10.14): had the Content Editor and JS Option too but decided to go with the one from the dump
Mateusz (Poland, 12.12.14): On the dump I went with A because it looks much easier than D but on the exam I had another answer: In SharePoint Designer on a List dashboard create a custom action and use Navigate to URL option. This seems like a good choice because it allows us to add ProductID at the end.

All: ABCD

QUESTION 24
Question 24
Contoso uses a SharePoint site that contains subsites. Each subsite represents different projects. Each project site is based on a team site template and stores information and documents. Contoso has five teams: Manufacturing, Sales, Administration, Marketing, and IT.

You must create a different look and feel for each team site such that any visitor to the site can identify the team by looking at the colors, fonts, and background image of the site.

You need to create a different look and feel for each team. What should you do? (Each correct answer presents part of the complete solution. Choose all that apply.)

A. Open Contoso Corporate Microsoft PowerPoint Slides Template, save the template as ContosoCorporate.master, and then upload it to the Theme Gallery.
B. From SharePoint Designer, go to Content Types. Right-click and select Content Type Settings.
C. Get a site background image for each team and upload it to the site collection images library. Then create a new master page for each team site by using the Master Page Gallery. Set the version to 15.
D. From the Web Designer Galleries, choose Composed Looks and create a new item for each team site. Specify the title, URL of the master page, theme, background image, and font schema file.
E. On the Site Settings page in the Look and Feel section, choose Change the look.
F. Create a new font XML schema with a font specification for each team.

Correct Answer: DEF
Section: [none]
Explanation

Explanation/Reference:

D:
* A Composed Look is made up of:
▪ Master Pages
▪ CSS
▪ Color palettes
▪ Font palettes
▪ Background image

F:
Fonts are defined in the font scheme (.spfont file) and the master page preview (.preview file) for a given SharePoint site. The font scheme defines the fonts that are used in four areas: title, navigation, heading, and body. Seven font schemes are included in SharePoint 2013. You can create additional font schemes. The font scheme files are located in the 15 subfolder of the Theme Gallery of the root site of the site collection (http://SiteCollectionName/_catalogs/theme/15/). To access the Theme Gallery from the SharePoint user interface, on the Site Settings page, under Web Designer Galleries, select Themes, and then select 15.

The following example describes the format for an .spfont file.

```
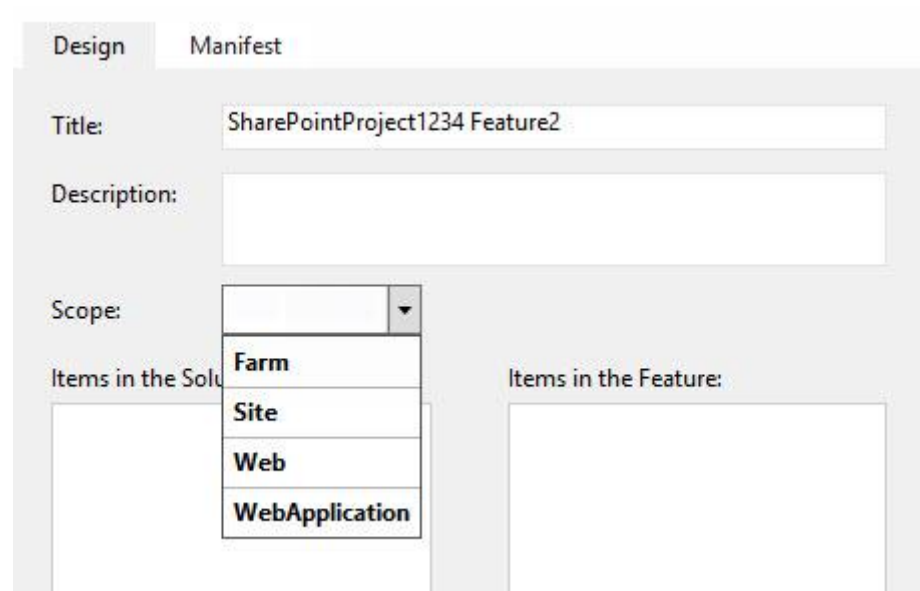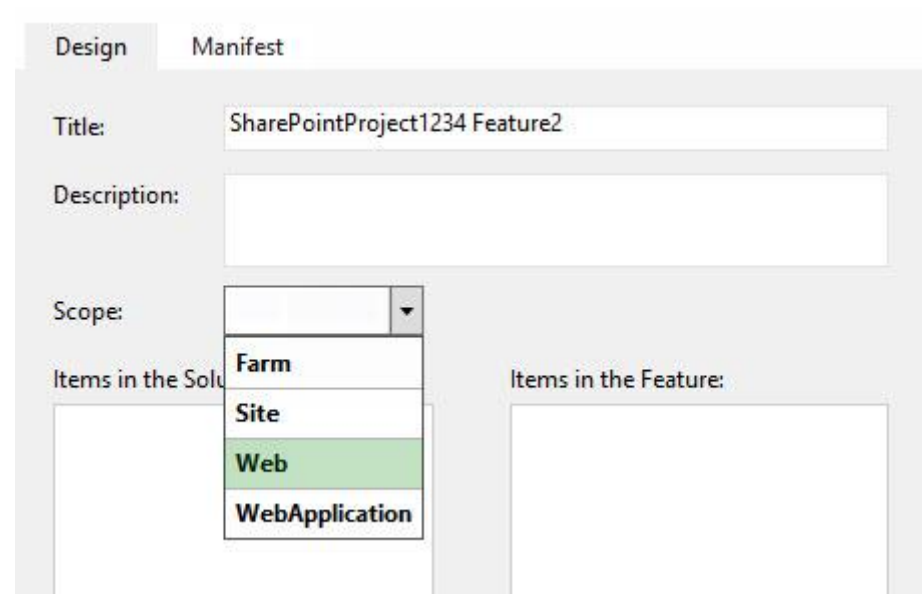<?xml version="1.0" encoding="utf-8"?>
<s:fontScheme name="FontSchemeName" previewSlot1="Slot1" previewSlot2="Slot2" xmlns:s="http://schemas.microsoft.com/sharepoint/">
  <s:fontSlots>
    <s:fontSlot name="FontSlotName">
      <s:latin typeface="LatinScriptFont" />
      <s:ea typeface="EAScriptFont"/>
      <s:cs typeface="CSFont" />
      <s:font script="Language" typeface="ScriptFont" />
      <!--Additional fonts-->
    </s:fontSlots>
    <!--Additional font slots-->
</s:fontScheme>
```

https://msdn.microsoft.com/en-us/library/office/jj945889.aspx

http://weblogs.asp.net/sreejukg/customize-sharepoint-2013-look-and-feel-for-intranet-sites

----
Niki: Answer DEF
70-517/Sam/Angie1/Anon/Angie3/Javier/Gwen/Eleonora/Noam/Hellen/MsExam: Answer BCD

LWilson from United States - Nov 29, 2013:
The correct answers are C,D, and E. You don't need to edit content types to create a customized look, you also need to apply the customized look that you created in composed looks.
Mateusz (Poland, 12.12.14): I went with DEF, wasn't sure about C.

QUESTION 25
Question 25
Adventure Works uses a web design firm to design the user interface for an upcoming toy sales website, www.toys.adventureworks.com. The website is built by using a SharePoint publishing template.

Adventure Works must implement the newly designed user interface for the site. The design firm provides a set of HTML, CSS, and JavaScript files.

You need to create and publish a SharePoint master page by using the supplied files. What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

A. From the Master Pages section in SharePoint Designer, select Create New Master Page and then replace the master page contents with the contents of the HTML file.
B. From SharePoint Designer, open the master page gallery. Right-click the new master page and then select Set as Default Master.
C. From the Design Manager, map a network drive to the /_layouts/masterpage/ folder. Then, in Windows Explorer, copy all the UI elements provided by the design team to the network share.
D. From the Edit Master Page section in Design Manager, select Convert an HTML File to a SharePoint Master Page to generate a master page from the HTML file provided by designer firm.
E. Publish the master page. Then, from Site Settings, choose the Look and Feel section, and then select Master Page. Choose the master page and select OK.
F. Preview the master page and select Snippets to get HTML segments of the SharePoint top navigation, quick launch, and body. Then, edit the master page by using Microsoft Notepad and replace the HTML with the new segments.

Correct Answer: CDEF
Section: [none]
Explanation

Explanation/Reference:
After you convert your master page and successfully preview it, you are ready to add snippets to the master page. A snippet is an HTML representation of a SharePoint component—such as a navigation control or search box or Web Part - that you can add to your master page. Adding snippets to your master page is how you quickly build the full range of SharePoint functionality into your master page. Adding snippets is basically a three-step process:
▪ Find and configure snippets in the Snippet Gallery.
▪ Copy snippets to your HTML master page.
▪ Preview and style snippets by using CSS.

After you configure a snippet, you copy it to the Clipboard and then paste it at the right spot in your HTML file. Your HTML design may already contain mockup or static controls, in which case you'll want to delete them or comment them out as you replace them with dynamic snippets from the Snippet Gallery.

http://msdn.microsoft.com/en-us/library/jj822363.aspx

C:
Upload design files

When you create a design, you can use whatever HTML editor you prefer and work with files locally on your computer. But, eventually, you will have to upload those files to the Master Page Gallery of your SharePoint site, so that you can use Design Manager to convert, preview, and polish your design.

The easiest way to upload and continue to work on design files is to map a drive on your computer to the Master Page Gallery of your SharePoint site. This connects a folder on your computer to the Master Page Gallery, so that you can work on files that reside on the server in SharePoint 2013 as if they were local files.

After you map a network drive, you can upload your design to SharePoint simply by copying the design files to a folder on the mapped drive of your computer that is connected to SharePoint. After you convert your HTML file to a SharePoint master page, and after you create page layouts and display templates that each have their own associated HTML file, you can continue to edit those associated HTML files in your HTML editor on your computer. Each time you save a file in the mapped drive, SharePoint automatically synchronizes the files on your computer with the Master Page Gallery. You can create your own folder structure on the mapped drive, and that structure is maintained by SharePoint and appears in the Master Page Gallery. You should keep all files related to one design in a single folder, and then copy that folder to the mapped drive when you are ready to upload your design.

For more information, see How to: Map a network drive to the SharePoint 2013 Master Page Gallery.

https://msdn.microsoft.com/en-us/library/office/jj822363.aspx

Note:
D, Not A: To convert the HTML file into a .master file
- Browse to your publishing site.
- In the upper-right corner of the page, choose Settings, and then choose Design Manager.
- In Design Manager, in the left navigation pane, choose Edit Master Pages.
- Choose Convert an HTML file to a SharePoint master page.
- In the Select an Asset dialog box, browse to and select the HTML file that you want to convert. etc

Anon: Answer ABDE
Niki: Answer CDEF

Mateusz (Poland, 12.12.14): I went with D, E, F on the dump. The key words here are "Design Manager and convert the HTML file" (answer D), select Snippets... (answer F) and publish (answer E).

QUESTION 26
Question 26
A company hosts its public website by using a SharePoint publishing site template. The website allows customers to browse and buy company products. The website user interface is optimized to support multiple browsers, smartphones and tablets.

You need to enable support for a new tablet type.
Which Design Manager option should you use? (To answer, select the appropriate link in the answer area.)

Hot Area:

EDIT LINKS

Design Manager: Welcome

1. **Welcome**
2. Manage Device Channels
3. Upload Design Files
4. Edit Master Pages
5. Edit Display Templates
6. Edit Page Layouts
7. Publish and Apply Design
8. Create Design Package

The Design Manager helps you create your own site design in SharePoint. Learn how SharePoint sites work

If you aren't creating your own design, you may instead want to choose from one of the following options:

- Import a complete design package
- Pick a pre-installed look

Otherwise, go ahead to the next step of the Design Manager. Get an overview

Correct Answer:

EDIT LINKS

Design Manager: Welcome

1. **Welcome**
2. Manage Device Channels
3. Upload Design Files
4. Edit Master Pages
5. Edit Display Templates
6. Edit Page Layouts
7. Publish and Apply Design
8. Create Design Package

The Design Manager helps you create your own site design in SharePoint. Learn how SharePoint sites work

If you aren't creating your own design, you may instead want to choose from one of the following options:

- Import a complete design package
- Pick a pre-installed look

Otherwise, go ahead to the next step of the Design Manager. Get an overview

Section: [none]
Explanation

Explanation/Reference:

Manage Device Channels

The device channel feature is ideal for more complex SharePoint sites where you create a single site and author content for that site, but map the content to use different master pages and style sheets that are specific to a device or group of devices. By using the device channel feature you can choose to show different content to different device channels using the same page and page layout.

Reference: Configure a SharePoint site for mobile devices

QUESTION 27
Question 27
You create an Enterprise Content Management (ECM) project. You write .NET client-side object model (CSOM) code to create a navigation term set in an existing term store to use in a taxonomy-based navigation. You need to complete the code to get a reference to the term store.

How should you complete the relevant code?
(To answer, drag the appropriate code segment to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.

Select and Place:

Answer Area

Code Segments
SPContext.Current.Web
"http://sharepoint.local"
new TaxonomySession(context, null)
TaxonomySession.GetTaxonomySession(context)
session
session, ts => ts.TermStores
GetTermSetsByTermLabel
GetTermSetsByName

```
int lcid = Thread.CurrentThread.CurrentCulture.LCID;
ClientContext context = new ClientContext(
                                                      );

TaxonomySession session =                                    ;

context.Load(                                    );
context.ExecuteQuery();
TermStore store = session.TermStores.FirstOrDefault();
if (store != null)
{
    foreach (TermSet ts in
        store.                          ("Navigation", lcid))
        {
            ...
        }
}
```

Correct Answer:

Answer Area

SPContext.Current.Web
"http://sharepoint.local"
new TaxonomySession(context, null)
TaxonomySession.GetTaxonomySession(context)
session
session, ts => ts.TermStores
GetTermSetsByTermLabel
GetTermSetsByName

```
int lcid = Thread.CurrentThread.CurrentCulture.LCID;
ClientContext context = new ClientContext(
    "http://sharepoint.local" );
TaxonomySession session = TaxonomySession.GetTaxonomySession(context);
context.Load( session, ts => ts.TermStores );
context.ExecuteQuery();
TermStore store = session.TermStores.FirstOrDefault();
if (store != null)
{
    foreach (TermSet ts in
        store. GetTermSetsByName ("Navigation", lcid))
        {
            ...
        }
}
```

Section: [none]
Explanation

Explanation/Reference:
public static TaxonomySession GetTaxonomySession(ClientRuntimeContext context)

http://msdn.microsoft.com/library/microsoft.sharepoint.client.taxonomy.taxonomysession.gettaxonomysession.aspx

QUESTION 28
Question 28
You plan to create a search-driven navigation that supports the Cross-site Publishing Feature.

Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area
Insert a Search Box Web Part on the page.	
Insert a Content Search Web Part on the page.	
Insert a Search Result Web Part on the page.	
Select the **Change query** button.	
Build and save the query.	
Select the **Edit Web Part** link.	

Correct Answer:

Actions	Answer Area
Insert a Search Box Web Part on the page.	Insert a Content Search Web Part on the page.
	Select the **Edit Web Part** link.
	Build and save the query.
Select the **Change query** button.	Insert a Search Result Web Part on the page.

Section: [none]
Explanation

Explanation/Reference:

Box 1: Add a Content Search Web Part to a page

Box 2-3: Configure the query for a Content Search Web Part
In the Web Part, click the Content Search Web Part Menu arrow, and then click Edit Web Part.
In the Web Part tool pane, in the Properties section, in the Search Criteria section, click Change query. Edit and change the query.

Box 4: (Search Result Web Part)
Here are some tools that make Cross-Site Publishing happen.
▪ Content Search Web Part:
It allows to build your own query using a wizard, this means fetching the content you want to see, and then allows you to display them using predefined display templates. It uses Search to query, which therefore allows us to show content from another Site.
▪ Search Results Web Part:
It can either show the results of a typed query in the Search Box, which is the traditional Search Results we know. But, and this is key, the Search Results also allows you to build a Query using the same Query Builder in the Content Search. In fact, I have found the Search Results to offer 95% of the same functionality as the Content Search. Therefore, it can also be used in Cross-Site Publishing Scenarios.

Reference: Configure Search Web Parts in SharePoint Server 2013

QUESTION 29
Question 29
Adventure Works uses a SharePoint publishing site to host their public-facing website at http://www.adventureworks.com. The website gives external users the ability to register and sign in to the site to buy Adventure Works products.

You notice that publicly registered users see the SharePoint ribbon. You need to ensure that the SharePoint ribbon is available only to content authors and administrators. What should you do?

A. In the SharePoint project, add an Empty Element and then use the `<HideCustomAction>` tag to hide the ribbon.

B. Open the current site master page in SharePoint Designer, place the `SharePoint:SPSecurityTrimmedControl` control around the div tag with the `s4-ribbonrow` ID. Set the `PermissionString` to **ManageSubWeb**.

C. In the SharePoint project, create a User Control and add the following code segment to hide the ribbon:

```
protected void Page_Load(object sender, EvetArgs e)
{
    if (UserHasPermissions(SPContext.Current.Web.CurrentUser))
    {
        SPContext.Current.Site.CommandUIVisible = true;
    }
    else
    {
        SPContext.Current.Site.CommandUIVisible = false;
    }
}
private bool UserHasPermissions(SPUser sPUser)
```

Then place the control in the master page.

D. Open the current site master page in SharePoint Designer and then place the `SharePoint:SPSecurityTrimmedControl` control around the div tag with the `s4-ribbonrow` ID. Set the `PermissionString` to **AddAndCustomizePages**.

E. Open the current site master page in SharePoint Designer, find a `div` tag with the `s4-ribbonrow` ID, and then remove all of the contents of the `div`.

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
The ribbon in publishing pages gets activated only for users with a minimum of **"AddAndCustomizePages"**

AddAndCustomizePages - Add, change, or delete HTML pages or Web Part Pages, and edit the Web site using a SharePoint Foundation–compatible editor.
ManageSubwebs - Create subsites such as team sites, Meeting Workspace sites, and Document Workspace sites.

http://social.msdn.microsoft.com/Forums/en-US/d054d018-bb59-409c-b6dd-8fbe6828dbbd/hide-ribbon-for-site-visitors-read-only-addandcustomizepages?forum=sharepointgeneralprevious

Bhupesh (India), 20.01.14: Use SPRibbon.GetCurrent(this.page).CommandUIVisible=true; to hide the ribbon for authenticated users after check permission
Mogley (Philippines, 11.04.15): Some says it's E but my answer is D.

ABCD: *70-517(E6)/Sam(E17)/Angie1(E12)/Anon(E17)/Niki(E17)/Angie3(E9)/Alberta(E10)/Noam(E8)/Hellen(E8)/MSExam(E17)* Answer B
BEDA: *Noam(E12),Hellen(E12)/MsExam(E30)*: Answer B
BEDA: *70-517(E10)/Sam(E30)/Angie1(E21)/Anon(E30)/Niki(E30)/Angie3(E16)/Alberta(E17)/Javier/Ronnie/Gwen/Eleonora* Answer E

QUESTION 30
Question 30
You work on a SharePoint Enterprise Content Management (ECM) project.

You need to ensure that all Microsoft Word documents are converted to Portable Document Format (PDF) once they are published and approved.

Which code segments should you include 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.)

Select and Place:

Answer Area

| Approved |
| ItemAdded |
| ItemUpdated |
| Published |
| Run |
| SPFileInfo |
| SPFileLevel |
| Start |

```
public override void [          ] (SPItemEventProperties properties)
{
    base.[          ] ();
    SPListItem spListItem = properties.ListItem;
    SPFile spFile = spListItem.File;
    string spFileExtension = Path.GetExtension(spFile);
    if (spFileExtension.ToUpper() == ".DOCX") &&
        (spFile.Level == [          ] . [          ] )
    {
        ConversionJob conversionJob =
            new ConversionJob("Word Automation Services Application");
        conversionJob.Name = "PDF Conversion";
        conversionJob.UserToken = properties.Web.CurrentUser.UserToken;
        conversionJob.Settings.OutputSaveBehaviour =
            SaveBehaviour.AlwaysOverwrite;
        conversionJob.Settings.OutputFormat = SaveFormat.PDF;
        conversionJob.Settings.UpdateFields = true;
        string siteUrl = properties.Web.Url + "/";
        string outputUrl = siteUrl + spFile.Url.Replace(".docx", ".pdf");
        conversionJob.AddFile(siteUrl + spFile.Url, outputUrl);
        conversionJob.Start();
    }
}
```

Correct Answer:

Answer Area

Approved

ItemAdded

ItemUpdated

Published

Run

SPFileInfo

SPFileLevel

Start

```
public override void ItemUpdated (SPItemEventProperties properties)
{
    base. ItemUpdated ();
    SPListItem spListItem = properties.ListItem;
    SPFile spFile = spListItem.File;
    string spFileExtension = Path.GetExtension(spFile);
    if (spFileExtension.ToUpper() == ".DOCX") &&
        (spFile.Level == SPFileLevel . Published )
    {
        ConversionJob conversionJob =
            new ConversionJob("Word Automation Services Application");
        conversionJob.Name = "PDF Conversion";
        conversionJob.UserToken = properties.Web.CurrentUser.UserToken;
        conversionJob.Settings.OutputSaveBehaviour =
            SaveBehaviour.AlwaysOverwrite;
        conversionJob.Settings.OutputFormat = SaveFormat.PDF;
        conversionJob.Settings.UpdateFields = true;
        string siteUrl = properties.Web.Url + "/";
        string outputUrl = siteUrl + spFile.Url.Replace(".docx", ".pdf");
        conversionJob.AddFile(siteUrl + spFile.Url, outputUrl);
        conversionJob.Start();
    }
}
```

Section: [none]
Explanation

Explanation/Reference:
ItemUpdated - runs after an item has been updated in the list

SPFileLevel.Published - SPFileLevel specifies the level of publication for a document.

Published: The document is published.

QUESTION 31
Question 31
You plan to use an app event receiver in conjunction with a remote event receiver. You need to create the remote event receiver by using Visual Studio 2012.

Which three actions should you perform in sequence?
(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area
Add an item based on the Remote Event Receiver template.	
Upload an item from the Remote Event Receiver template to the library.	
Inherit an item from the Remote Event Receiver template.	
Implement the **ProcessEvent** method.	
select the event type in the SharePoint Customization wizard.	

Correct Answer:

Actions

Answer Area

Add an item based on the Remote Event Receiver template.

Upload an item from the Remote Event Receiver template to the library.

select the event type in the SharePoint Customization wizard.

Inherit an item from the Remote Event Receiver template.

Implement the **ProcessEvent** method.

Section: [none]
Explanation

Explanation/Reference:
To handle events that occur to items in apps for SharePoint
1. In Visual Studio, open **Solution Explorer**, and then choose the project node of the app for SharePoint.
2. On the menu bar, choose **Project**, **Add New Item**.
3. In the **Templates** pane, choose **Remote Event Receiver**, specify a name in the **Name** box, and then choose the **Add** button. The SharePoint Customization Wizard appears.
4. (box 2) On the **Choose Event Receiver Settings page**, choose an event receiver type, such as **List Item Events**.
5. Set the event source to a list whose events you want to handle, such as **Announcements**.
6. In the list of events to handle, select the check box next to each event that you want to handle, such as **An item was added**, and then choose the **Finish** button. A web application is created with a web service that contains a code file. For more information, see Handling events in apps for SharePoint.
7. (box 3) In the code file for the web service, **add code that will execute every time** the events that you specified occur. The contents of this service match the contents of the web service for a remote event receiver, including the **ProcessEvent**() and ProcessOneWayEvent() methods. The code in these events runs when the app events that you specified occur.

```
/* Trigger an event when an item is added to the SharePoint list*/
Public class OnPlantUpdated : IRemoteEventService
{
   public SPRemoteEventResult ProcessEvent (SPRemoteEventProperties properties)
   {
     SPRemoteEventResult result = new SPRemoteEventResult();
   If (properties.EventType == SPRemoteEventType.ItemAdding ||
       properties.EventType == SPRemoteEventType.ItemUpdating)
     {
     // Code to run on item adding or updating.
     }
   }
}
```

Reference: How to: Create a remote event receiver
http://msdn.microsoft.com/en-us/library/office/jj220043.aspx
http://msdn.microsoft.com/en-us/library/office/dn456315.aspx

Anon: Answer

| Add an item based on the Remote Event Receiver template. |
| Upload an item from the Remote Event Receiver template to the library. |
| Implement the **ProcessEvent** method. |

QUESTION 32
Question 32
A company uses SharePoint for document sharing and collaboration. Users create content types for different types of documents that are created daily. All document content types have ProjectID, Type, and AuditStatus columns. ProductID is not a required field.

The Auditing department requires that every document have a ProjectID within two weeks of the creation date. If a document does not have a ProjectID, the AuditStatus column must show a message for users to specify the ProjectID. For performance reasons, fewer than 50 documents at a time should be processed.

You need to write a work-item timer job to meet the requirement. How should you complete the relevant code?
(To answer, select the appropriate option from the drop-down list in the answer area.)

Hot Area:

```
public class MyWorkItemTimerJob : SPWorkItemJobDefinition
{
    public static readonly string WorkItemJobDisplayName =
        "Contoso Work Item Item Job";
    public static readonly Guid WorkItemTypeId =
        new Guid("{4A359645-E5EF-44F3-9523-5CB43D5C0A89}");

    public MyWorkItemTimerJob()
```

▼
public override Guid WorkItemType()
public override void Execute(SPJobState jobState)

```
    public override string DisplayName
```

▼
public int BatchFetchLimit
public override int BatchFetchLimit = 50;

▼
public override void Execute(...)
protected override bool ProcessWorkItem(...)

```
    private bool IsTwoWeeksOldNow(SPListItemLastModifiedDate anItem)
}
```

Correct Answer:

```
public class MyWorkItemTimerJob : SPWorkItemJobDefinition
{
    public static readonly string WorkItemJobDisplayName =
        "Contoso Work Item Item Job";
    public static readonly Guid WorkItemTypeId =
        new Guid("{4A359645-E5EF-44F3-9523-5CB43D5C0A89}");

    public MyWorkItemTimerJob()
```

▼
public override Guid WorkItemType()
public override void Execute(SPJobState jobState)

```
    public override string DisplayName
```

▼
public int BatchFetchLimit
public override int BatchFetchLimit = 50;

▼
public override void Execute(...)
protected override bool ProcessWorkItem(...)

```
    private bool IsTwoWeeksOldNow(SPListItemLastModifiedDate anItem)
}
```

Section: [none]
Explanation

Explanation/Reference:
ProcessWorkItems   Launches the processing of work items and specifies the content database, the work item collection that contains the work items, and the current state of the pausable timer jobs.
BatchFetchLimit   Gets an integer specifying the limit imposed on the batch size of the work-item collection.
Execute   Execute the job definition based on the given job instance identifier.

http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.administration.spworkitemjobdefinition_members.aspx

QUESTION 33
Question 33
A company uses SharePoint team sites for their projects, which last for a month.

At the end of every month the project site must be archived and moved to a backup web application. The company plans to create a timer job.

You need to write custom code that will move the site from the production web application to the archived web application.

Which method of the timer job should you override?

A. RunNow
B. Execute
C. Update
D. Provision

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
Execute
Executes the job definition on the local machine and is intended to be used only by the timer service.

Incorrect:
A: RunNow
Schedules the job for immediate execution.
C: SPJobDefinition.Update method
Causes the job definition to save its state and propagate changes to all machines in the farm.
D: Provision
Makes the changes to the local server that are needed before the object can be used.

QUESTION 34
Question 34
You need to create workflows for your business processes by using the least amount of development effort.

Which four actions should you perform in sequence?
(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions   Answer Area

| Verify and use the out-of-the-box workflows for the objective. |

| Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio. |

| Import Activity Designer from the Windows Azure websites. |

| Use Microsoft Visual Studio 2012 to create the workflow custom activities. |

| Use SharePoint Designer to create a workflow definition by using the activities. |

Correct Answer:

Actions

Answer Area

Verify and use the out-of-the-box workflows for the objective.

Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.

Import Activity Designer from the Windows Azure websites.

Use Microsoft Visual Studio 2012 to create the workflow custom activities.

Use SharePoint Designer to create a workflow definition by using the activities.

Section: [none]
Explanation

Explanation/Reference:
Windows Azure Workflow brings a new class of workflow to SharePoint Server 2013 Preview. Workflows built by using Windows Azure Workflow can take advantage of several new capabilities.

Now we are ready to create SharePoint 2013 Workflows, you can either go with SharePoint Designer or Visual Studio.

But I soon realized that with these new features came a HUGE limitation… No more code. As we can see in this MSDN page http://msdn.microsoft.com/en-us/library/jj163199.aspx 2013 Workflows are now using a declarative style and all properties are set through a small window that only accept C# expression.

http://en.share-gate.com/blog/sharepoint-2013-and-windows-azure-workflow

The Activity Designer Library template is used to create a custom activity designer. Custom activity designers are used to create the design-time experience for activity use, controlling how the activity and its property page appear in Visual Studio.

Visual Studio allows you to import reusable workflows created in SharePoint Designer 2010 and convert them to code workflows for use in your SharePoint sites.

Niki: Answer

Verify and use the out-of-the-box workflows for the objective.

Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.

Use Microsoft Visual Studio 2012 to create the workflow custom activities.

Use SharePoint Designer to create a workflow definition by using the activities.

Anon/Javier/Ronnie/Gwen/Eleonora: Answer

Import Activity Designer from the Windows Azure websites.

Use Microsoft Visual Studio 2012 to create the workflow custom activities.

Use SharePoint Designer to create a workflow definition by using the activities.

Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.

QUESTION 35
Question 35
You develop a reusable workflow on a development site by using SharePoint Designer. The workflow must be made available to a test site on a different SharePoint environment.

You need to deploy and start the workflow on the test site by using Microsoft Visual Studio 2012.

Which three actions should you perform in sequence?
(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area
Use SharePoint Designer to save the workflow as a .wsp solution package.	
Use Visual Studio to activate the workflow feature.	
Use Visual Studio to activate the solution package.	
Upload the solution package to the desired site.	
Import the solution package into Visual Studio.	
Use Visual Studio to export the workflow as a .wsp solution package.	

Correct Answer:

Actions

Answer Area

Use SharePoint Designer to save the workflow as a .wsp solution package.

Use Visual Studio to activate the workflow feature.

Import the solution package into Visual Studio.

Use Visual Studio to activate the solution package.

Upload the solution package to the desired site.

Use Visual Studio to export the workflow as a .wsp solution package.

Section: [none]
Explanation

Explanation/Reference:
Visual Studio allows you to import reusable workflows created in SharePoint Designer 2010 and convert them to code workflows for use in your SharePoint sites.

Steps:
1. Creating a simple, reusable workflow in SharePoint Designer.
2. Exporting the SharePoint Designer reusable workflow to a .wsp file and into SharePoint.
3. Importing the .wsp file into Visual Studio by using the Import Reusable Workflow project.
4. Altering the workflow by adding code.
5. Using the imported workflow in a SharePoint site.

- When you create a declarative workflow in Microsoft SharePoint® Designer 2010, you can save the workflow as a template in a SharePoint solution package (.wsp) file. In some circumstances, you may need to import your workflow template into the Microsoft Visual Studio® 2010 development system, and repackage it as a Visual Studio project—for example, if you want to create a solution package that contains both a declarative workflow and custom-coded workflow activities.
- Visual Studio SharePoint workflow projects deploy just like other Visual Studio SharePoint projects.

Reference: Walkthrough: Import a SharePoint Designer Reusable Workflow into Visual Studio

Anon/Javier/Ronnie/Gwen/Eleonora: Answer

	Answer Area
	Use Visual Studio to export the workflow as a .wsp solution package.
Use Visual Studio to activate the workflow feature.	Use SharePoint Designer to save the workflow as a .wsp solution package.
Use Visual Studio to activate the solution package.	Import the solution package into Visual Studio.
Upload the solution package to the desired site.	

QUESTION 36
Question 36
You plan to create a SharePoint Business Process Automation (BPA) project.

You need to process items for approval with the least amount of developer effort.

Which tool should you use?

A. Remote Event Receiver
B. Out-of-the-box workflow
C. SharePoint Designer workflow
D. Work Item Timer Job

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:

QUESTION 37
Question 37
You plan to create a SharePoint Business Process Automation (BPA) project.

You need to process items in queues on a configurable schedule.

Which tool should you use?

A. Remote Event Receiver
B. Work Item Timer Job
C. Out-of-the-box workflow
D. SharePoint Designer workflow

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
Visio 2013 and SharePoint Designer 2013 make it easy for business analysts, process consultants, and IT professionals to collaborate and build workflows.

Thanks to some of the improvements with SharePoint workflow capabilities in concert with SharePoint Designer 2013, it is now easy to write workflows that respond to list events or even write workflows that wakeup on a timed schedule to perform some task.

QUESTION 38
Question 38
A company's IT department implements a Help Desk Ticketing system that involves workflow development by using SharePoint Designer and InfoPath.

The Help Desk Ticket workflow involves multiple steps and tasks that have serial approvals of multiple users and groups with custom task email messages.

The Approver accidently rejects a workflow step, and the workflow has stopped. The Approver then corrects the step.

You need to continue the workflow to reflect the updated approval.
Which activity should you use? (To answer, select the appropriate action from the list of actions in the answer area.)

Hot Area:

Set Workflow Status
Set Workflow Variable

List Actions
Check In Item
Check Out Item
Copy Document
Create List Item
Delete Item
Discard Check Out Item
Set Field in Current Item
Translate Document
Update List Item
Wait for Event in List Item
Wait for Field Change in Current Item

Task Actions
Assign a task
Start a task process

Correct Answer:

Set Workflow Status
Set Workflow Variable

List Actions
Check In Item
Check Out Item
Copy Document
Create List Item
Delete Item
Discard Check Out Item
Set Field in Current Item
Translate Document
Update List Item
Wait for Event in List Item
Wait for Field Change in Current Item

Task Actions
Assign a task
Start a task process

Section: [none]
Explanation

Explanation/Reference:

QUESTION 39
Question 39
A company's IT department implements a Help Desk Ticketing system that involves workflow development by using SharePoint Designer and InfoPath.

The Help Desk Ticket workflow involves multiple steps and tasks that have serial approvals of multiple users and groups with custom task email messages.

You need to manage task approvals.

Which activity should you use? (To answer, select the appropriate action from the list of actions in the answer area.)

Hot Area:

Set Workflow Status
Set Workflow Variable

List Actions
Check In Item
Check Out Item
Copy Document
Create List Item
Delete Item
Discard Check Out Item
Set Field in Current Item
Translate Document
Update List Item
Wait for Event in List Item
Wait for Field Change in Current Item

Task Actions
Assign a task
Start a task process

Correct Answer:

Set Workflow Status
Set Workflow Variable

List Actions
Check In Item
Check Out Item
Copy Document
Create List Item
Delete Item
Discard Check Out Item
Set Field in Current Item
Translate Document
Update List Item
Wait for Event in List Item
Wait for Field Change in Current Item

Task Actions
Assign a task
Start a task process

Section: [none]
Explanation

Explanation/Reference:

QUESTION 40
Question 40
A company develops a workflow by using SharePoint Workflow Manager. The Auditing department has a SQL Server database that contains a list of all available software. The list contains the names of the users who have permission to use the software. The data is available through a Windows Communication Foundation (WCF) service that uses OData and is deployed internally.

The IT department plans to implement a help desk solution on the IT site collection that involves the creation of workflows.

A user must request approval to use software that is not available internally from three different managers. The workflow should be approved if two of the three managers approve the request. The workflow has an Evaluation and an Approval stage.

You need to develop the workflow by using SharePoint Designer. Which five actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area

Actions

Create a stage for every phase of the workflow.

In the **Transition to Stage** section of the Approval stage, insert the **Go to a Stage** action and then set the **Go to** value to **End of Workflow.**

In the Evaluation Stage, insert the **Call Http Web Service** condition and the **Get an Item from a Dictionary** condition.

In the **Transition to Stage** section of the Evaluation stage, insert the **Go to a Stage** action and then set a **stage** value to **End of Workflow** in the else clause.

In the Approval stage, insert the **Start a Task Process** and add the names of the participating managers. Set the **Completion Criteria** property to **Wait of percentage of a response.**

Correct Answer:

Actions

Answer Area

Create a stage for every phase of the workflow.

In the Evaluation Stage, insert the **Call Http Web Service** condition and the **Get an Item from a Dictionary** condition.

In the **Transition to Stage** section of the Evaluation stage, insert the **Go to a Stage** action and then set a **stage** value to **End of Workflow** in the else clause.

In the Approval stage, insert the **Start a Task Process** and add the names of the participating managers. Set the **Completion Criteria** property to **Wait of percentage of a response.**

In the **Transition to Stage** section of the Approval stage, insert the **Go to a Stage** action and then set the **Go to** value to **End of Workflow.**

Section: [none]
Explanation

Explanation/Reference:

QUESTION 41
Question 41
You plan to create a workflow design by using Microsoft Visio 2013 and then import the design into SharePoint Designer 2013.

You need to ensure that you have repetition capability. Which shape should you use?

A. Stage

B. Assign a Task

C. Step

D. Loop

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
Stage shapes
A stage can contain any number of shapes and may include branching. However, there can be only one path into a stage (and a step) and one path out. All actions in the workflow must be contained by a stage.

Loop shapes
Loops are a series of connected shapes that will execute as a loop, returning from the last shape in the series to the first, until a condition is satisfied.

Step shapes
Steps represent a grouped series of sequential actions. Steps must be contained by a stage. A step shape must also have an Enter and Exit shape to define the paths in and out of the shape.

http://msdn.microsoft.com/en-us/library/jj163272

70-517/Sam/Angie1/Anon/Niki/Angie2/Angie3/Alberta/Javier/Gwen/Eleonora/Hellen/MsExam Answer A
Mateusz (Poland, 12.12.14): Answer D

QUESTION 42
Question 42
You plan to create a workflow design by using Microsoft Visio 2013 and then import the design into SharePoint Designer 2013.

You need to ensure that you have branching capability. Which shape should you use?

A. Assign a Task

B. Stage

C. Loop

D. Step

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
A stage can contain any number of shapes and may include branching.

Stage shapes
A stage can contain any number of shapes and may include branching. However, there can be only one path into a stage (and a step) and one path out. All actions in the workflow must be contained by a stage.

Loop shapes
Loops are a series of connected shapes that will execute as a loop, returning from the last shape in the series to the first, until a condition is satisfied.

Step shapes
Steps represent a grouped series of sequential actions. Steps must be contained by a stage. A step shape must also have an Enter and Exit shape to define the paths in and out of the shape.

http://msdn.microsoft.com/en-us/library/jj163272

Trish (Singapore, 30.01.14): In my exam it asked "Branching" functionality so the ans is "Step " i believe.. Saying that my friends who took exam at same time got quest which is in dumps..
zaza (South Africa, 30.01.2014): I agree with @Trish the question about balancing I ended up choosing stage not loop bt I was jus guessing b....

QUESTION 43
Question 43
You develop a SharePoint app to create an approval workflow for expense reports. The app must collect user input before starting the workflow.

You need to use ASP.NET forms in the workflow.

Which form type should you use?

A. Workflow input form
B. Workflow initiation form
C. Workflow task form
D. Workflow modification form

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
An initiation form is opened when a user manually launches a workflow whose workflow definition is associated with the form. When the workflow kicks off, the user is presented with the initiation form and is prompted to enter information that the workflow will need. For example, the user could enter a justification for a workflow initiating an approval for a new business expense.

QUESTION 44
Question 44
You develop a SharePoint app to create an approval workflow for expense reports. The app must collect user input during the workflow.

You need to use ASP.NET forms in the workflow.

Which form type should you use?

A. Workflow modification form
B. Workflow input form
C. Workflow task form
D. Workflow initiation form

Correct Answer: A
Section: [none]
Explanation

Explanation/Reference:
You may want to enable your users to alter the workflow at certain points while it is running on an item. For example, you might want to enable a user to assign his or her task to another person or even add a specific task to the workflow. The options you present to users to change the workflow as it is running on an item are called modifications.

You can create modification forms that enable users to specify the parameters of modifications.

As you design your workflow, you create a modification by adding an EnableWorkflowModification activity to the workflow. The availability of the modification is determined by the **EventHandlingScope** activity to which you add the EnableWorkflowModification activity. Defining a modification adds a link on the workflow status page for that particular modification. When the containing **EventHandlingScope** activity comes into scope as the workflow runs, Microsoft SharePoint Foundation makes the modification link available to the user. When the containing activity passes out of scope, Windows SharePoint Services removes the modification link from the workflow status page.

The modification link on the workflow status page directs the user to the workflow modification form.

QUESTION 45
Question 45
You need to create a workflow custom activity to use in a custom action in SharePoint by using Microsoft Visual Studio 2012.

Which five actions should you perform in sequence?
(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

Select and Place:

Actions	Answer Area
Create a new custom action by using SharePoint Designer.	
Activate the feature.	
Deploy the SharePoint solution package (.wsp) file.	
Package the custom activity as a SharePoint solution package (.wsp) file.	
Add a new item named **Workflow Custom Activity** to the project.	
Add new actions to the design surface and configure and connect the new actions as needed.	
Package the custom activity as a template (.stp) file.	

Correct Answer:

Actions	Answer Area
Create a new custom action by using SharePoint Designer.	Add a new item named **Workflow Custom Activity** to the project.
	Add new actions to the design surface and configure and connect the new actions as needed.
	Package the custom activity as a SharePoint solution package (.wsp) file.
	Deploy the SharePoint solution package (.wsp) file.
	Activate the feature.
Package the custom activity as a template (.stp) file.	

Section: [none]
Explanation

Explanation/Reference:
Task 1 – Create a Custom Workflow Action in Visual Studio
Task 2 – Deploy Custom Workflow Action to SharePoint

1. From the Solution Explorer window, right-click the **SPDCustomWorkflowActions** project and select**Package** to package the solution WSP.

2. Launch Internet Explorer and navigate to your top-level SharePoint site collection; e.g.:http://intranet.contoso.com.
3. Click **SiteActions >> Site Settings**.
4. Under **Galleries**, click on the **Solutions** link to view the site collection's **SolutionGallery**.
5. Click on the **Solutions** tab in the ribbon to view the **Upload Solution** button.
6. Click the **Upload Solution** button.
7. Browse to **C:\%Office365TrainingKit%\Labs\3.2\Source\Before\Visual Studio\SPDCustomWorkflowAction\bin\Debug \SPDCustomWorkflowActions.wsp** and click **Open** and**OK**.
8. In the **Solution Gallery – Activate Solution** dialog, click the **Activate** button on the Ribbon to activate the solution.
9. Click the **Activate** button on the ribbon to activate the solution.

Reference: Exercise: Implement a Custom Workflow Action in Visual Studio

70-517/Sam: 1-"Create a new custom action by using SharePoint Designer"
70-517: 5-???

Anon: Answer

	Answer Area
	Activate the feature.
	Create a new custom action by using SharePoint Designer.
Deploy the SharePoint solution package (.wsp) file.	Add new actions to the design surface and configure and connect the new actions as needed.
Package the custom activity as a SharePoint solution package (.wsp) file.	Package the custom activity as a template (.stp) file.
	Add a new item named **Workflow Custom Activity** to the project.

Noam: Answer

Create a new custom action by using SharePoint Designer.

Add new actions to the design surface and configure and connect the new actions as needed.

Package the custom activity as a SharePoint solution package (.wsp) file.

Deploy the SharePoint solution package (.wsp) file.

Activate the feature.

QUESTION 46
Question 46
You develop a SharePoint-hosted app that is used by internal users to read and write data. The app has the following requirements:
▪ The app must be able to find and display the products that are purchased most often by customers.
▪ The app must be able to read product information from a custom SQL Server database by using an external list.
▪ The app must be able to read from and write to the user profile.
▪ The app must be able to make changes to lists by using the minimum permissions necessary.
▪ The app must be able to read enterprise keywords.

You need to configure permissions for the app. Which scopes and permissions should you use?
(To answer, select the appropriate options from each drop-down list in the answer area.)

Hot Area:

Scope	Permission
▼	QueryAsUserIgnoreAppPrincipal
Search	
Reporting	
Enterprise Search	
Enterprise Resources	
▼	Read
BCS	
Tenant	
Workflow	
Site Collection	
User Profiles ▼	
	Read
	Write
	Manage
	FullControl
Web ▼	
	Read
	Write
	Manage
	FullControl
▼	Read
Search	
Workflow	
Social Feed	
Taxonomy	

Correct Answer:

Scope		Permission
▼		QueryAsUserIgnoreAppPrincipal
Search		
Reporting		
Enterprise Search		
Enterprise Resources		
▼		Read
BCS		
Tenant		
Workflow		
Site Collection		
User Profiles	▼	
	Read	
	Write	
	Manage	
	FullControl	
Web	▼	
	Read	
	Write	
	Manage	
	FullControl	
▼		Read
Search		
Workflow		
Social Feed		
Taxonomy		

Section: [none]
Explanation

Explanation/Reference:
Search - QueryAsUserIgnoreAppPrincipal
- The app must be able to find and display the products that are purchased most often by customers.
http://code.msdn.microsoft.com/office/SharePoint-2013-Querying-a629b53b

Scope	Permission	Propertie
Search	QueryAsUserIgnoreAppPrincipal	

BCS - Read
- The app must be able to read product information from a custom SQL Server database by using an external list.

User Profiles - Write
- The app must be able to read from and write to the user profile.

Web - Manage
- The app must be able to make changes to lists by using the minimum permissions necessary.

Taxonomy - Read
- The app must be able to read enterprise keywords.

QUESTION 47
Question 47
You develop an autohosted app for SharePoint. The app will access SharePoint data in the host web. You need to configure the minimum required data access permissions for the app.

How should you configure permissions in the app manifest? (To answer, select the appropriate option from each drop-down list in the answer area.)

Hot Area:

Scope	Permission
BCS	Read
Search	Write
Web	Manage
Workflow	FullControl

Correct Answer:

Scope	Permission
BCS	Read
Search	Write
Web	Manage
Workflow	FullControl

Section: [none]
Explanation

Explanation/Reference:

QUESTION 48
Question 48
You create SharePoint apps for multiple clients. Each client has a unique environment with specific requirements. You need to choose the appropriate hosting location for each app.

What should you do?
(To answer, drag the appropriate hosting options to the correct description in the answer area. Each hosting option may be used once, more than once, or not at all.

Select and Place:

Answer Area

Autohosted

Provider-hosted

SharePoint-hosted

Description	Hosting Option
App needs to be writen by using HTML, JavaScript and PHP that accesses a MySQL Database.	
Load balancing, multi tenancy and maintenance will be handled by Windows Azure.	
App needs to be writen by using HTML, JavaScript and Web Parts.	
App will run on a third-party web hosting service with an ASP.NET platform.	

Correct Answer:

Answer Area

Autohosted

Provider-hosted

SharePoint-hosted

Description	Hosting Option
App needs to be writen by using HTML, JavaScript and PHP that accesses a MySQL Database.	Provider-hosted
Load balancing, multi tenancy and maintenance will be handled by Windows Azure.	Autohosted
App needs to be writen by using HTML, JavaScript and Web Parts.	SharePoint-hosted
App will run on a third-party web hosting service with an ASP.NET platform.	Provider-hosted

Section: [none]
Explanation

Explanation/Reference:
PHP and MySQL are also available in Azure

msdn.microsoft.com/en-us/library/office/fp179887.aspx
http://www.windowsazure.com/en-us/develop/php/tutorials/website-w-mysql-and-git/
http://www.windowsazure.com/en-us/develop/php/

QUESTION 49
Question 49
You prepare an on-premise farm to support the creation of SharePoint apps.

You need to create an instance of a service application before building apps.

Which service application should you create?

A. Secure Store service
B. App Management service
C. Machine Translation service
D. SharePoint-hosted service

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
SharePoint-hosted apps
Start with the simplest option: SharePoint-hosted apps, or apps where all components are hosted on either an on-premises or Office 365 SharePoint farm. SharePoint-hosted apps are installed on a SharePoint 2013 website, called the host web. They have their resources hosted on an isolated subsite of a host web, called the app web.

B:
▪ The App Management Service is responsible for storing and providing information concerning SP App licenses and permissions
▪ All licenses for apps downloaded from Marketplace will be stored in Apps service application
▪ The App Management Service is accessed each time app is requested or used in SharePoint to verify validity of the request

B: The App Management Service is responsible for storing and providing information concerning SP App licenses and permissions
All licenses for apps downloaded from Marketplace will be stored in Apps service application The App Management Service is accessed each time app is requested or used in SharePoint to verify validity of the request

Incorrect:

Not A: Secure Store Service is a shared service that provides storage and mapping of credentials such as account names and passwords. It enables you to securely store data that provides credentials required for connecting to external systems and associating those credentials to a specific identity or group of identities.
Not C: Machine Translation Service is a new service application in SharePoint 2013 that provides automatic machine translation of files and sites.

http://social.technet.microsoft.com/wiki/contents/articles/12516.sharepoint-2013-app-management-service.aspx

All: Answer D
Mateusz (Poland, 12.12.14): App Management Service (I have never seen SharePoint-hosted service app...)
Miester (UK, 28.05.15): Answer changed. this didn't have the an App Management service so I chose SharePoint Hosted App.

QUESTION 50
Question 50
You must select an app model to deploy apps to an Office 365 small business tenant.

The business logic of the apps is located in a remote web application.

What should you do?

A. Create a SharePoint-hosted app. Implement the business logic by using JavaScript.
B. Develop Autohosted app and integrate data sources with the business logic by using OData.
C. Deploy the business logic to the host web by using a Full Trust SharePoint solution.
D. Develop an OData service provider infrastructure and publish the provider to the _layouts directory
E. Develop provider-hosted apps and integrate data sources with the business logic by using OData.

Correct Answer: B
Section: [none]
Explanation

Explanation/Reference:
All: AECD *Answer:* C
Niki: Answer B
Bhupesh (India), 20.01.14: Sharepoint Autohosted app + oData
Duckl (Germany, 27.10.14): had autohosted + oData and (instead of provider hosted and oData)

QUESTION 51
Question 51
You create a cloud-hosted SharePoint app.

You must make the app available in the SharePoint Store for customers to install on their host webs.

You need to keep the style and navigation of the app the same as the host web of the app after it is installed by any customer.

What should you do?

A. Add a reference to SP.UI.Controls.js on the host web. Pass the AppUrl parameter to the host web. Apply branding to the host web.
B. Copy the CSS file from the app to the host web. Run the Chrome control to convert the CSS file to the host web format. Apply the styles contained in the CSS file to the host web.
C. Use a Chrome control to find the differences in the styles between the host web and the app. Resolve all of the differences by using JavaScript.
D. Add a reference to the SP.UI.Controls.js file located in the new /_layouts/15 directory. Pass the SPHostUrl parameter to the start page of the app. Use the Chrome control in JavaScript.
E. Use an app template and an app.master master file for branding.
F. Add a reference to the SP.UI.Controls.js file located in the new /Jayouts/15 directory. Pass the HostUrl parameter to the start page of the app. Use the Chrome control in the HTML page in a declarative manner.

Correct Answer: D
Section: [none]
Explanation

Explanation/Reference:
Microsoft allows developers to import a very basic version of the SharePoint 2013 chrome into their apps without having to manually create matching HTML controls. The functionality for this can be found in the SP.UI.Controls.js file located in the new /_layouts/15 directory. To use the chrome control, first add a reference to SP.UI.Controls.js (make sure you've already loaded the requisite JQuery files and other dependencies), then add an empty <div> to your page markup at or near the top of the page.

The chrome control in SharePoint 2013 enables you to use the header styling of a specific SharePoint site in your app without needing to register a server library or use a specific technology or tool. To use this functionality, you must register a SharePoint JavaScript library through a standard `<script>` tag. You can provide a placeholder by using an HTML `div` element and further customize the control by using the available options. The control inherits its appearance from the specified SharePoint website.

```
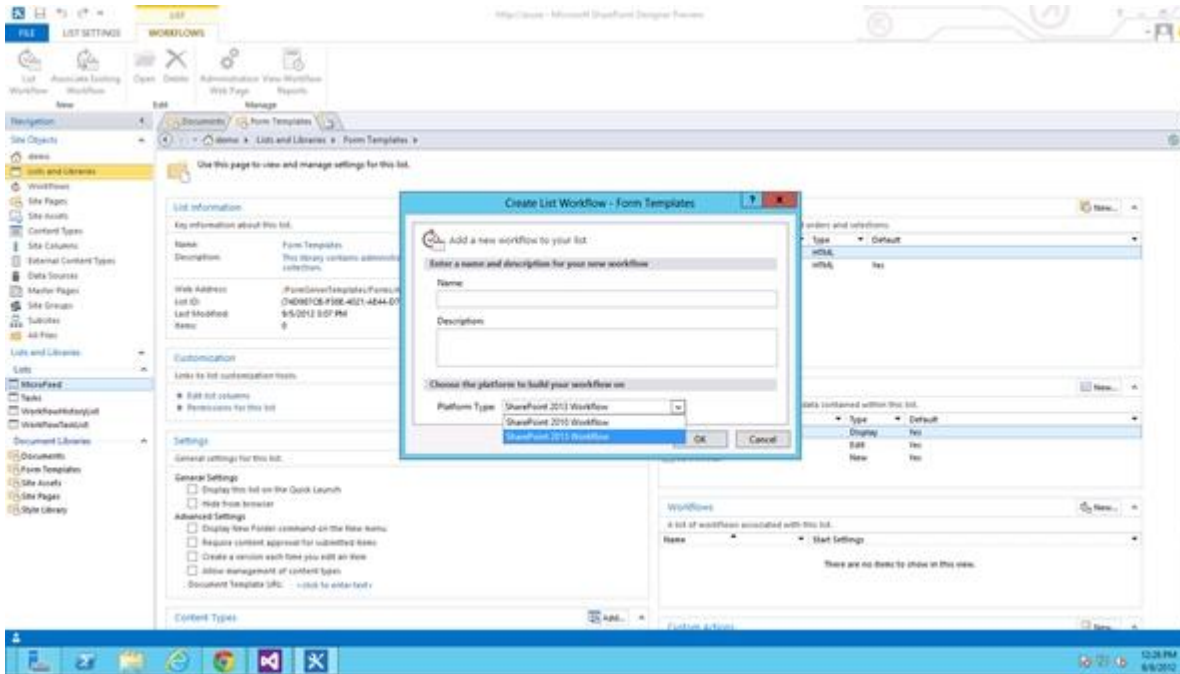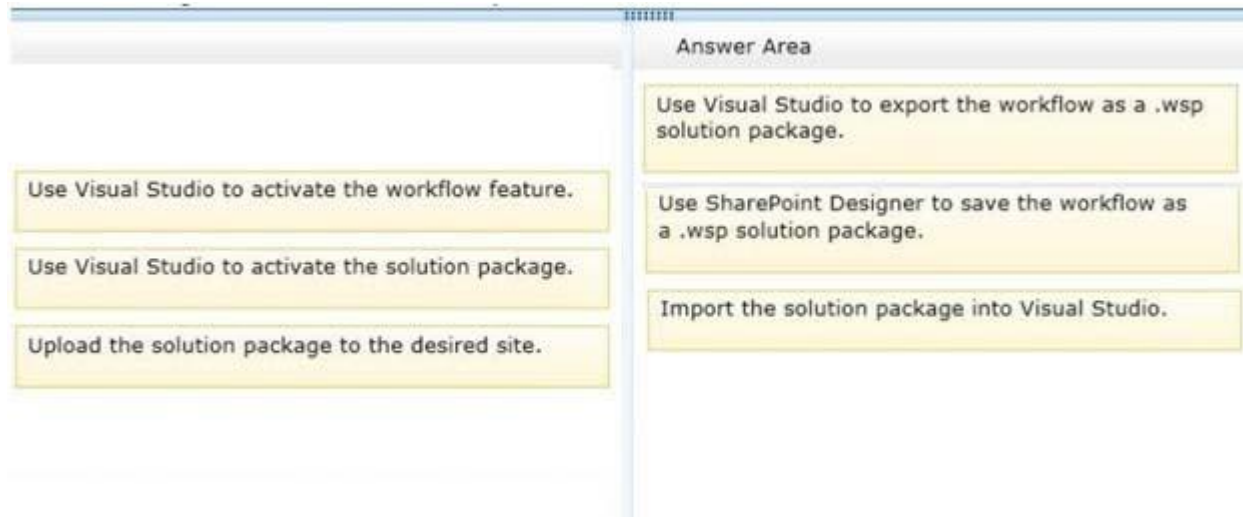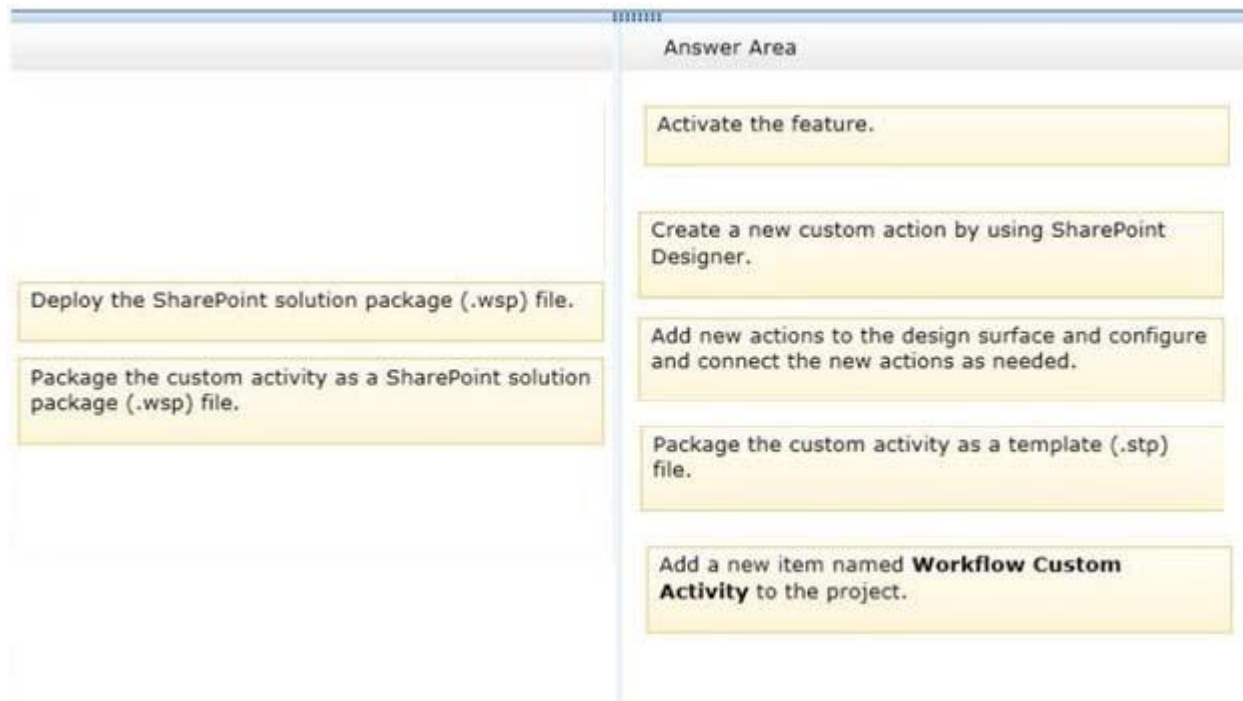//load the SharePoint resources
$(document).ready(function () {
    //Get the URI decoded URL.
    hostweburl = decodeURIComponent(getQueryStringParameter("SPHostUrl"));

    // The SharePoint js files URL are in the form:
    // web_url/_layouts/15/resource
    var scriptbase = hostweburl + "/_layouts/15/";

    // Load the js file and continue to the success handler
    $.getScript(scriptbase + "SP.UI.Controls.js", renderChrome)
});
```

| Query string: | {StandardTokens}&SPHostTitle={HostTitle} |

The chrome control automatically takes the following values from the query string:
- SPHostUrl
- SPHostTitle
- SPAppWebUrl
- SPLanguage

{StandardTokens} include SPHostUrl and SPAppWebUrl.

http://msdn.microsoft.com/en-us/library/office/fp179916.aspx
http://www.binarywave.com/blogs/eshupps/Lists/Posts/Post.aspx?ID=272

QUESTION 52
Question 52
You have an app named TaskManager published at http://sharepoint.contoso.com/apps.

You need to remove the app and ensure that users will no longer be able to use the app by using Windows PowerShell cmdlets.

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.

Select and Place:

Answer Area

Uninstall-SPAppInstance -Identity $instance

Disable-SPFeature -Identity $instance

Delete-SPAppInstance -Identity $instance

Remove-SPServiceApplication $instance

Get-SPWebApplication

Get-SPAppInstance -Web

$instance =

http://sharepoint.contoso.com/apps |
where { $_. Title -eq 'TaskManager' }

Correct Answer:

Answer Area

Uninstall-SPAppInstance -Identity $instance

Disable-SPFeature -Identity $instance

Delete-SPAppInstance -Identity $instance

Remove-SPServiceApplication $instance

Get-SPWebApplication

Get-SPAppInstance -Web

$instance = Get-SPAppInstance -Web

http://sharepoint.contoso.com/apps |
where { $_. Title -eq 'TaskManager' }

Uninstall-SPAppInstance -Identity $instance

Section: [none]
Explanation

Explanation/Reference:

QUESTION 53
Question 53
You have an app named TaskManagerApp that is published at http://sharepoint.contoso.com/apps.

You need to remove the app and ensure that users will no longer be able to use the app.

Which Windows PowerShell cmdlets should you run?

A. ```
$instance = Get-SPAppInstance -Web http://sharepoint.contoso.com/apps |
     where { $_. Title -eq 'TaskManagerApp' }
Uninstall-SPAppInstance -Identity $instance
```

B. ```
$instance = Get-SPWebApplication http://sharepoint.contoso.com/apps
Uninstall-SPAppInstance -Identity $instance
```

C. ```
$instance = Get-SPAppInstance -Web http://sharepoint.contoso.com/apps |
     where { $_. Title -eq 'TaskManagerApp' }
Disable-SPFeature -Identity $instance -Url http://sharepoint.contoso.com/apps
```

D. ```
$instance = Get-SPWebApplication http://sharepoint.contoso.com/apps
Remove-SPServiceApplication $instance
```

**Correct Answer:** A
**Section: [none]**
**Explanation**

**Explanation/Reference:**