SAS BI Content Development for SAS 9 exam

Information Consumer Reporting Applications

Use the SAS Add-In for Microsoft Office.

- Open and navigate a data source in MS Excel.
- Identify the different types of data sources that can be used with the SAS Add-In for Microsoft Office.
- Use the Quick Stats task to calculate basic statistics for a SAS data source.
- Use the Automatic Chart task to create charts and explore a SAS data source.
- View and interact with SAS results.

Use SAS Web Report Studio.

- Open existing reports, view reports, navigate reports.
- Build, customize, save and share reports.
- Create a new report using one of these methods: Edit mode, Report Wizard, a report template, open a source directly; open a stored process directly.

Use SAS Information Delivery Portal.

- View SAS BI Dashboards, SAS reports, and SAS stored processes, SAS publication channels, SAS packages using the SAS Information Delivery Portal.
- Create a new page and be able to share a page on the SAS Information Delivery Portal.
Data Management

Modify an existing SAS Information Map.

- Given a scenario where an information map is not providing necessary statistical information, modify data items to provide users with the desired data.

Create a New SAS BI Dashboard Indicator.

- Explain the relationship between indicators and their associated indicator data components.

Create data sources for reporting and analysis.

- Build a SAS Enterprise Guide project to read and combine data sources to create a new table.
- Identify the different types of data sources that can be used with SAS Web Report Studio.
- Use SAS OLAP Cube Studio to build an OLAP cube.
- Identify the required metadata permissions to view data.

Interpret permissions and file structures defined in metadata by the platform administrator.

- Explain the differences between metadata users, groups and roles.
- Identify which SAS applications support metadata roles.
- Explain the structure and use of the SAS Folders tree.
- Define the purpose and types of connection profiles.
- Determine metadata permission settings based upon the type of function to be accomplished.

Describe the metadata created and used by the SAS Platform.

- Define the purpose of a connection profile.
- Identify SAS Management Console interface components.
- Define default requirements for distributing reports using SAS Web Report Studio.
- Explain the process of registering a library, including SAS and DBMS libraries.
- Describe how to prepare images for use in SAS Web Report Studio.

Create information map data sources.

- List valid data sources.
- List the requirements for data sources that can be used to create an information map.
Creating Information Maps

Utilize different data sources.

- Identify the steps required for creating an information map using SAS Information Map Studio.
- Given a particular scenario, determine the type of query language required to retrieve the data values from each type of data source.
- Detail the types of joins that are available when an information map contains more than one relational table.
- Explain how to automatically create relationships between a newly added data source and any existing data sources.
- Explain how to replace unresolved resources such as servers, libraries, tables and cubes if a resource becomes unresolved or if you want to change resources.

Use filters and the prompting framework to dynamically subset data.

- Define the types of filters that are available for subsetting data in an information map.
- List the different methods for creating a new filter in SAS Information Map Studio.
- Describe the ways that data items can be used in a filter.
- List the possible filter conditions.
- Given a particular scenario, determine the different filter values that could be used.
- Describe the options that might be available when you create a filter.
- List the steps to create a filters including a simple filter, a compound filter, and an identity-driven filter.
- Describe the functionality provided by the filter combination section of the New Filter window.

Create prefilters to subset the information map data.

- Define and state the purpose of prefilters.
- Describe the two types of prefilters.
- Determine required steps to create a general prefilter.
- Determine required steps to create an authorization-based prefilter.
- Given a scenario where users should see only sale totals for their country, identify the type of filter to create.
Building a SAS BI Dashboard Application

Build SAS BI Dashboard Components.

- Explain the process for designing dashboard components.
- Identify the steps required to build a dashboard.
- Describe the four data sources you can use when you define indicator data.
- When creating indicator data, use the Data Mapping tab to associate properties with data columns in the data source.
- Use an information map as a data source for an indicator object.
- Use an SQL query as the data source for an indicator data object.
- List the different components that are used to create dashboards.
- List the steps required to create an indicator.
- Explain the purpose of the indicator configuration icons.
- Describe how indicator display types aggregate data.
- Determine what you must define when you create and indicator.
- Set dashboard properties.

Build advanced SAS BI Dashboard Components.

- Define and create ranges.
- Identify the indicator types that support ranges.
- Add interactive features to dashboards such as adding interactions between indicators and linking indicators to other content.
- Describe the categories of indicator properties.
- Enable the zoom feature for an indicator or static content.

Building Stored Processes

Create a stored process from a SAS Enterprise Guide Project.

- Explain the steps to create a stored process.
- Identify the types of stored process metadata.
- List the types of servers that a stored process can run on.
- Explain the differences between creating a stored process from a single task versus all the tasks in a SAS Enterprise Guide project.
- Describe the extra step required to create a stored process from more than one of the tasks, but not from all of the tasks in a SAS Enterprise Guide project.
- Use the metadata LIBNAME engine to reference data library metadata definitions.
When using the Create New Stored Process wizard, determine the code that you want the wizard to include in the stored process.

Create a stored process from a SAS Program.

- Identify the stored process code elements.
- Define the Create New Stored Process Wizard steps when you create a stored process from SAS code in SAS Enterprise Guide.
- Create a stored process from existing SAS code in SAS Enterprise Guide.
- List the applications that can be used to register stored process metadata.
- Create a stored process that writes directly to the _WEBOUT fileref.
- Explain how prompt values are resolved in the SAS code.

Add prompts to a stored process.

- In a SAS Enterprise Guide project, create prompts that are used when creating a SAS Stored Process.
- Identify the types of stored process prompts.
- Explain how to populate prompt values.
- Establish dependencies between prompts.
- Define the requirements for establishing prompt dependencies.

Create a stored process to provide a dynamic data source.

- Identify the requirements for a stored process providing a dynamic data source to an information map including the execution server, permissions, and the result capabilities.
- Create an information map using dynamic data source created by a stored process.

Define the macro variables generated for each prompt type.

- Describe how stored processes pass user values to the stored process code.
- Identify the macro variables that are created for different prompt types.
- Define and process a stored process parameter that can accept multiple values.

Create shared prompts.

- Identify the three types of prompt groups.
- List the steps to create a shared prompt.
- Define the attributes that can be customized when you use a shared prompt.
- Describe the process to unshare a shared prompt.
Utilizing Multidimensional (OLAP) Data Sources

Apply Online Analytical Processing concepts.

- Define OLAP terminology including cube, dimension, level, and hierarchy.

Build an OLAP cube with SAS OLAP Cube Studio.

- Use the Cube Designer Wizard to build a cube to perform such tasks as
  - define the data sources used to load a cube
  - specify any drill-through tables used by the cube
  - define the cube dimensions, levels, and hierarchies
  - select measures and measure details for the cube
  - specify member properties
  - configure aggregations.
- Modify existing OLAP code to perform actions such as adding a calculated measure, updating the cube and coalescing cube aggregations.
- List and describe the types of tables that can be used to define a SAS OLAP cube.
- Define the two available types of cube updating.

Build an information map from a SAS OLAP Cube.

- Describe the factors you should take into consideration when you build information maps with an OLAP data source.
- Explain what the MDX language is and when to use it.
- Create an information map that is based on an OLAP cube.

Note: All 23 main objectives will be tested on every exam. The 99 expanded objectives are provided for additional explanation and define the entire domain that could be tested.