Hyperion Training Program

S.No	Topic	Duration (Hours)
1	Data Warehousing Fundamentals	4
2	Hyperion Analytics Services (Essbase), Essbase Integration Services, Essbase Studio, BSO, ASO	25
3	Hyperion Web Analysis (Analyzer)	3
4	Hyperion Planning [After Essbase]	15

Deliverable:

1. Students Guides.
2. Lab Guide.
3. Video Tutorials recorded session for missing classes.
4. Certification Questions
5. Essbase application "**Sales Order processing**".
6. Planning Application implementation "**Work force Effective**"

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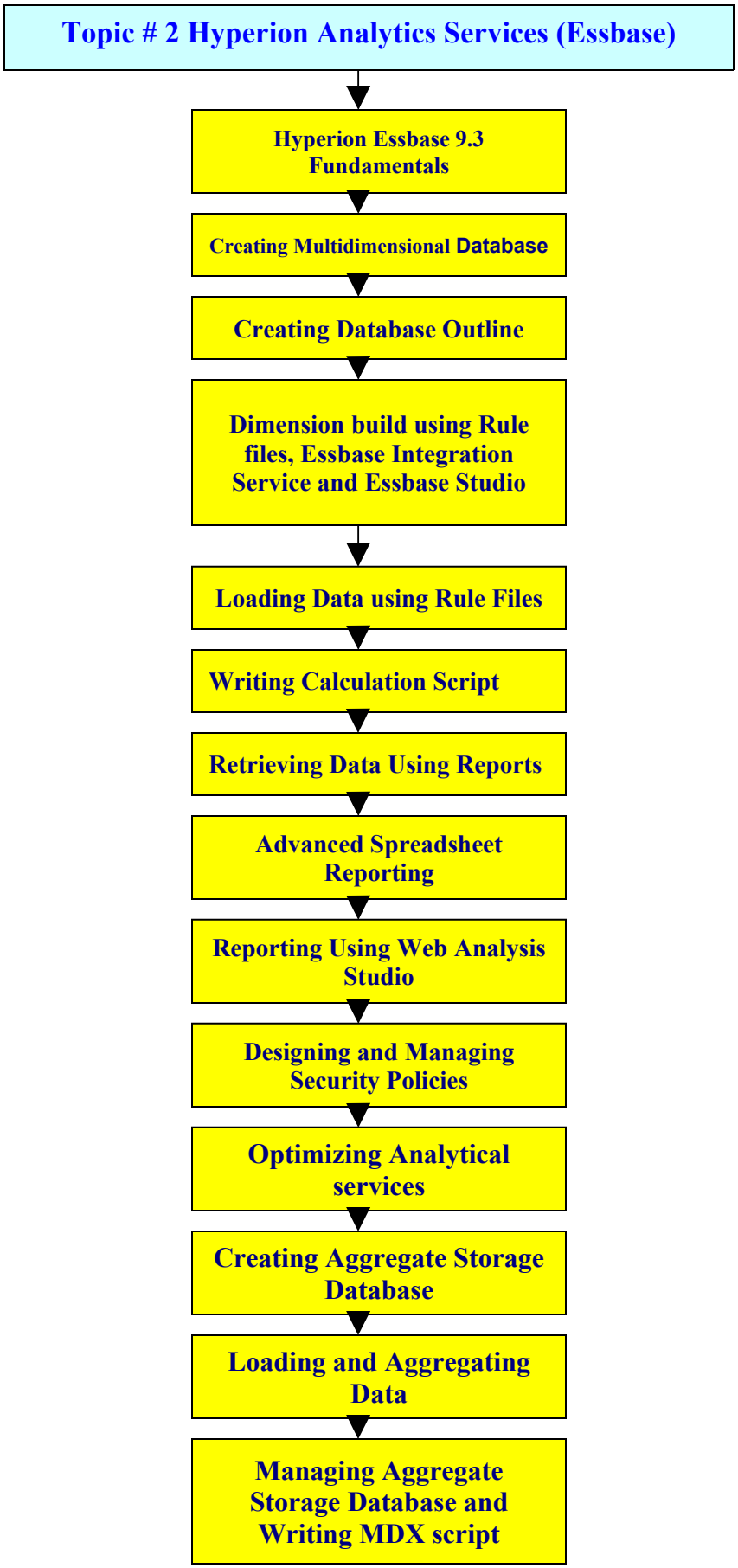
Topic # 1 Data Warehousing Fundamentals

Session #	Date and Time	Area of Focus	Session Topics
1	Day 1 Duration 5 Hours	Understanding fundamentals of Data warehousing	**DATA WAREHOUSE OVERVIEW** a. Overview b. Typical uses **DEFINITION, ARCHITECTURE AND CONCEPTS** c. Enterprise Data Model d. Operational vs. historical data e. Extract Transform Load (ETL) f. Metadata g. Data warehouse vs. data mart h. Data mining i. OLAP vs. OLTP j. Massive size implementation k. Logical design vs. physical design l. Normalization vs. denormalization m. Referential constraints **DATA MODELLING OPTIONS** n. Entity model o. Star schema p. Snowflake schema **DATA MODELLING DEVELOPMENT LIFE CYCLE** q. Requirements analysis r. Requirements gathering s. Schema design t. Warehouse design u. Implementation v. Follow-up and review
2	Day 1 3 Hours	Self Learning Developing candidates understanding by reading case studies and exploring latest treads in current scenario.	1 **Developing understanding about Data warehouse fundamentals and latest techniques.** 1) Exploring current trends and techniques. 2) Reading case studies(Visiting Forums/Case studies).

3	**Day 2 Duration 1 Hour**	**Quiz # 1 & Discussion Data Warehousing Fundamentals Quiz.**	**1. Quiz to identify the how far candidates are comfortable with Data warehousing fundamentals understanding - I.**
4	**Day2 Duration 4 Hours**		**DIMENSIONAL MODELLING DESIGN** w. Overview x. Metadata properties y. Star schema z. Snowflake schema aa. Cubes bb. Measures and facts cc. Attributes and relationships dd. Dimension ee. Hierarchies ff. Joins gg. Summary tables and aggregation hh. Exercises **IMPLEMENTATION OPTIONS** ii. Overview jj. Top down kk. Bottom up ll. Sizing mm. Cleaning nn. Populating the data warehouse **EXTRACT, TRANSFORM & LAOD (ETL) CONSIDERATIONS** oo. Definition and scope pp. Extract options qq. Transform options rr. Load options ss. Surrogate key concepts tt. Slowly Changing Dimensions (SCD)
5	**Day 2 Self Learning 2 Hours**	**Understanding advance DWH Concepts**	**Developing DHW designing constraints.** 3) Understanding DWH Design constrains and techniques. 4) Reading case studies (Visiting Forums/Case studies).

6	**Day 2 1 hour**	**Session ending Quiz # 2 & Discussion**	**1. Quiz to identify the how good candidate is Data warehousing Design constraints and DWH understanding - II**


Topic # 2 Hyperion Analytics Services (Essbase)
Hyperion Essbase 9.3 Fundamentals
Creating Multidimensional Database
Creating Database Outline
Dimension build using Rule files, Essbase Integration Service and Essbase Studio
Loading Data using Rule Files
Writing Calculation Script
Retrieving Data Using Reports
Advanced Spreadsheet Reporting
Reporting Using Web Analysis Studio
Designing and Managing Security Policies
Optimizing Analytical services
Creating Aggregate Storage Database
Loading and Aggregating Data
Managing Aggregate Storage Database and Writing MDX script

Session #	Date and Time	Area of Focus	Session Topics
1	Day 3 1 Hour	Understanding the OLAP fundamentals with respect to Essbase	**Online Analytical Processing Overview** 1. Data Transformation. 2. Multidimensional View of Information 3.Multidimensional Data Model and Data Analysis Technique. 4. OLAP Solutions
2	Day 3 1 Hours	Hyperion system 9 overview and concept building for Analytical services	**Analytic Services Overview** 1. Business Performance Management 2. Hyperion System 9 Overview 3. Hyperion Analytic Solution 4. Analytic Services 5. Analytic Administration Services
3	Day 3 4 Hour	Understanding Multidimensional Database design implications. Defining Dimensions and its members.	**Creating Multidimensional Databases & Application.** 1. Life Cycle of the Essbase Analytics Database Design 2. Creating Essbase Analytics Applications and Databases 3. Creating and Managing Database Outlines 4. Creating Time, Accounts, and Scenario Dimensions
	Day 3 2 Hours	Quiz , Discussion & Self Learning	Understanding Multi Dimensional Database concepts. Essbase Overview. Essbase fundamentals
4	Day 4 3 Hours	**Practice #1** • Creating multidimensional Database for sample application. • Defining Dimension types for sample application. • Real time issues during Database & application creation.	
	Day 4 1 Hour	Essbase Fundamentals Quiz #1	**Essbase Quiz to identify candidates comfort level at MDD fundamentals and Essbase overview.**

4	**Day 4** **2 Hours**	**Implementation of Dimensions and members in Essbase Outline**	**Enhancing Database Outlines** 1. Creating Business-view Dimensions 2. Specifying Consolidation Operators and Defining Calculations 3. Setting Time Balance Properties 4. Creating Label-Only and Shared Members 5. Defining Duplicate Member Names and Member Aliases 6. Creating Attribute Dimensions
	Day 4 **1 Hours**	**Self Learning & Discussion**	**Understand Essbase Outline, Dimensions, Members and Member type. Identify general issues/error occurs during outline creation.**
5	**Day 5** **1 Hours**	**Practice #2** ○ **Creating Database outline for sample application.** ○ **Defining Dimension and its members.** ○ **Determining Dimension type and setting member properties.** ○ **Issues while creating members and setting its properties.**	
	Day 5 **1 Hour**	**Essbase Quiz #2 & Discussion**	**Essbase Quiz to identify candidates comfort level at MDD fundamentals and Essbase overview.**
	Day 5 **2 Hours**	**Understanding needs of Dynamic Dimension Building using Rule files.**	**Creating Basic Dimensions Build Rules Files** 1. Data Prep Editor overview 2. Creating Dimensions using Rules Files 3. Selecting Dimension Build Method 4. Defining Field Properties 5. Validating Dimension Build Rules Files 6. Configuring Dimension Maintenance Settings
	Day 5 **3 Hours**	**An introduction to EIS**	**Creating Dimension and loading data using EIS.** 1. Designing OLAP Model using EIS. **2** Building Metaoutling. **3** Building Dimension and loading data.
	Day 5 **2 Hour**	**Self Learning**	**Understanding dynamic dimension**

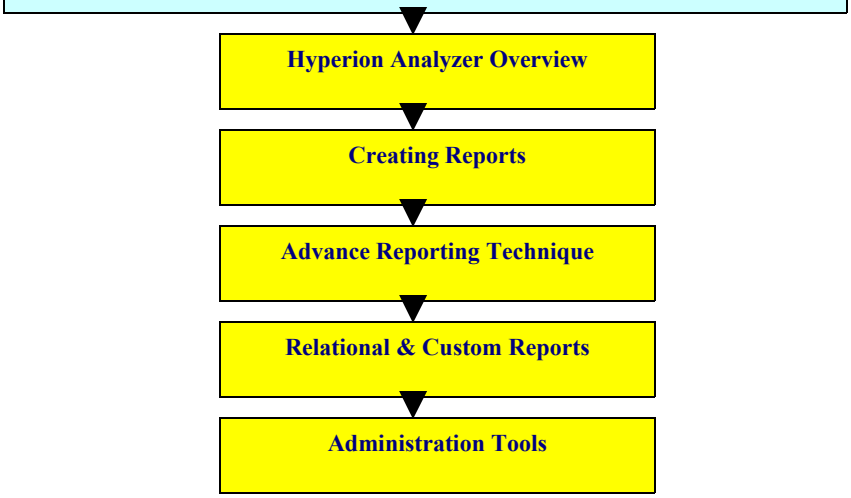
			building using rule files and Outline Editor.
	Day 6 2 Hours	**Practice #3** **Dimension creation using own rule file (user defined) for the sample application.** **Runtime changing Dimension & its member properties.** **Issues involved during Rule file creation and execution.**	
6	**Day 6 2 Hours**	**Changing Dimension and Member type dynamically**	**Creating Advanced Dimension Build Rules Files** 1. Creating Shared Members 2. Manipulating Fields 3. Creating User-Defined Attributes
	Day 6 2 Hours	**Attribute dimension overview**	**Creating Attribute Dimensions** 1. Adding Attribute Dimensions to Outlines 2. Design Considerations for Attribute Dimensions 3. Creating Attributes with Rules Files
	Day 6 2 Hours	**Self Learning & Discussion**	Scanning forums and identifying common issues and errors while creating Dimensions, Members and outlines.
	Day 6 2 Hours	**Practice #4** • **Setting member advanced properties using rule files for sample application.** • **Common error and issues while Dimension building.**	
	Multiple Choice Questions (Day 3- Day 6) • **OLAP fundamentals** • **Analytical Services (Essbase).** • **Hyperion System 9** • **Multidimensional Database concept** • **Essbase Database Outline.** • **Basic operations on Database outline.** • **Various types of Outline** • **Rule files for Dynamic Outline preparation** • **Member properties(Shared, Never Shared, UDA)** • **Attribute Dimension**		
8	**Day 7 Hours 4**	**Loading data into outlines and dealing issues during data loading.**	**Loading Data** 1. Data Load Options 2. Loading Data from Flat Files 3. Performing Free-Form Data Loads 4. Loading Data with Rules Files 5. Loading Data from SQL Data

			Sources
	Day 7 Hours 2	**Practice #5** • **Defining new Dimension as attribute type using Outline editor** • **Defining new Dimension as attribute type using Rule Files** • **Free form loading data.** • **Loading data using Rule files(with Multiple scenario) in Sample Basic application** • **Loading data from SQL Source** • **Dealing with error files. Issues related load data fail.**	
	Day 7 Hour 2	**Session end quiz, Self Learning & Discussion**	**Visiting to the forums and identifying various means to upload data into Essbase. Optimizing the load process and various techniques to load data using rule and free form loading.**
9	**Day 8 4 Hours**	**Understanding & Implementing Business Rules using Calc Script**	**Calculating the Essbase Analytics Database** 1. Outline Calculations 2. Calculation Scripts 3. Two-Pass Calculations 4. Dynamic Calculations 5. Dynamic Time Series
	Day 8 2 Hours	**Practice #6** • **Writing basic calc script.** • **Writing Outline calc script.** • **Developing formulas.** • **Calculating Time Series Data** • **Developing Calculation Scripts** • **Common error while writing calc scripts**	
	Day 8 2 Hours	**Session end quiz, Self Learning & Discussion**	**Identifying commonly used formulas and issues associated with them.**
	Multiple Choice Questions (Day 7- Day 8) • **Loading data under various scenarios (Free form and Rule Files).** • **Dynamic Outline creation with loading data.** • **Building simple calculation scripts.** • **Advance calc scripts.**		

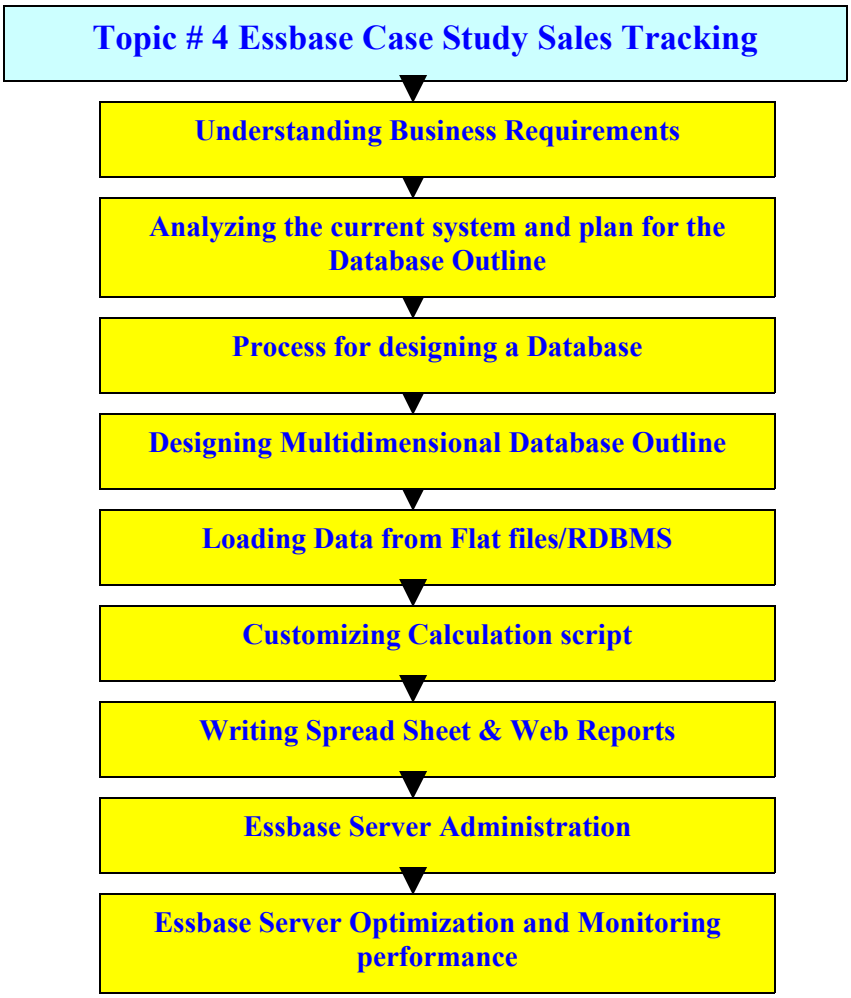
10	**Day 9 Hours 4**	**Navigating Data using report script and smart view(short cut)**	**Retrieving Data** 1. Smart View Overview 2. Connecting to the Analytic Server 3. Retrieving Multidimensional Data into Two-dimensional Spreadsheet Reports 4. Navigating Through Spreadsheet Reports 5. Manipulating Multidimensional Data 6. Smart View Options. 7. Report Scripts.
	Day 9 2 Hours	**Practice #7** **Writing Report scripts (Essbase reports script) for sample Basic Database.** **Writing basic Spread Sheet reports(Using Drill Down, Drill UP, Pivots)** **Basic Spread Sheet Reports** **Issues and common error occurs during data retrieval.**	
	Day 9 2 Hour	**Session end quiz, Self Learning & Discussion**	**Visiting forums and seeing sample reports, i.e Top 'N' Analysis, Drill Down, Roll Up, Pivoting queries.**
	Day 10 3 Hours	**Building reports using MS Excel with Hyperion Essbase client.**	**Advanced Spreadsheet Reporting** 1. Updating Data on the Analytic Server 2. Creating Free-Form Reports 3. Selecting Members 4. Creating Reusable Queries 5. Extending the Spreadsheet 6. Environment with Visual Explorer
	Day 10 2 Hours	**Understanding basic security policies and user management**	**Designing and Managing Security Policies** 1. User Management and Security 2. Controlling Access to Database Cells
	Day 10 2 Hours	**Practice #8** • **Data loading using Spread Sheet.** • **Writing Free form reports for sample basic application** • **Writing Spread Sheet Queries.** • **Advance spread sheet reports.**	

	Day 10 **1 Hours**	**Session end quiz, Self Learning & Discussion**	**Viewing and implementing spread sheet reports and**
	Day 11 **2 Hours**	**Practice #10** • **Creating users & groups.** • **Setting access permissions.** • **Defining security policies for Database**	
	Day 11 **3 Hours**	**Understanding various techniques to enhance Analytical Services Performance.**	**Monitoring Performance** 1. Improving Analytic Services Performance. 2. Optimizing Analytic Services Caches. 3. Optimizing Database Restructuring. 4. Optimizing Data Loads. 5. Optimizing Calculations. 6. Optimizing Reports and Other Types of Retrieval.
	Day 11 **3 Hours**	**Session end quiz, Self Learning & Discussion**	**Understand the data load, Reports retrieval optimization techniques. Considering various real time scenarios. Issues and errors need to deal while implementing optimizing.**
	Multiple Choice Questions (Day 9- Day 11) • **Data retrieval using spread sheet reports** • **Data loading using Spread Sheet** • **Advance Spread Sheet Reports**		

Topic # 3 Hyperion Web Analysis (Analyzer)

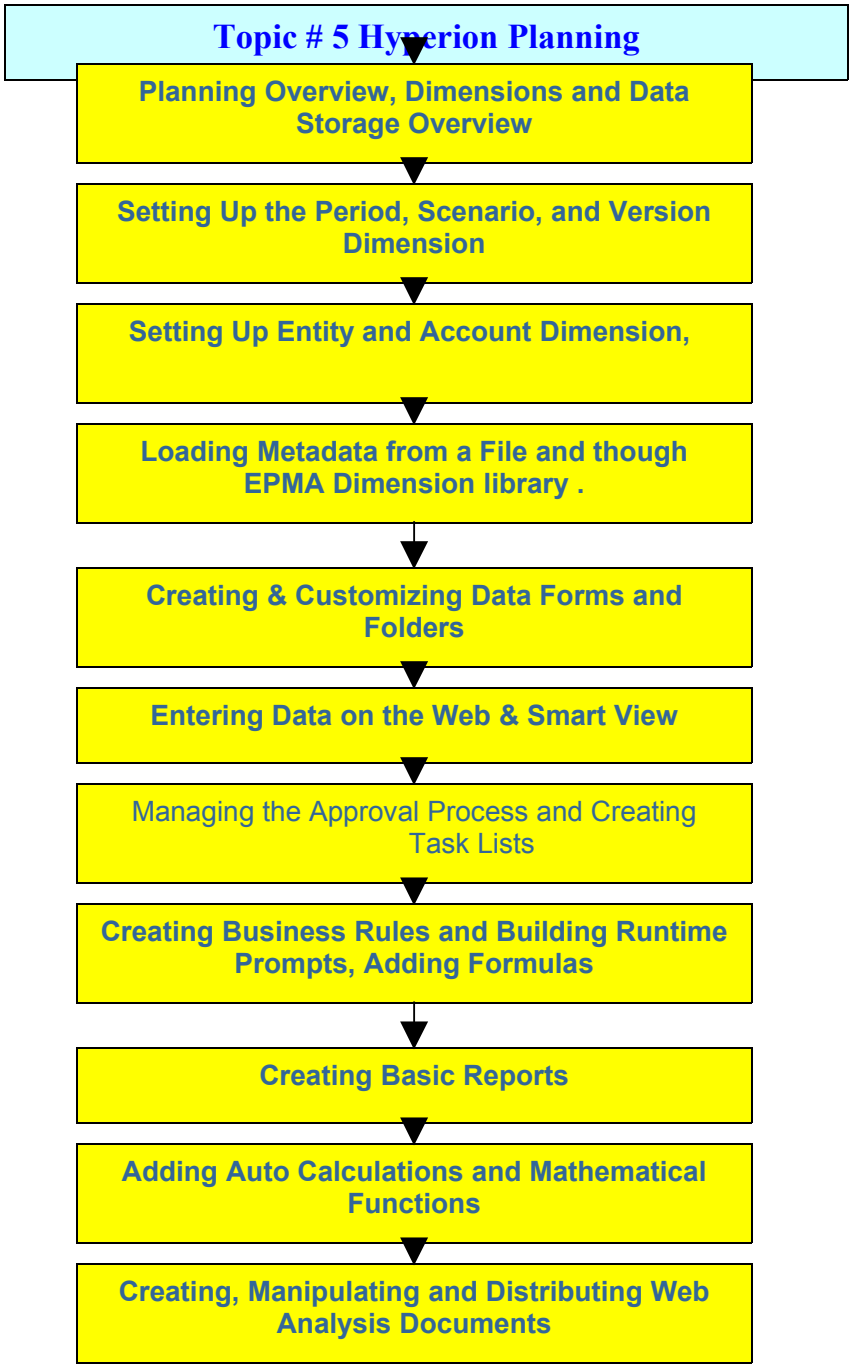


Session #	Date and Time	Area of Focus	Session Topics
1	**Day 12 Hours 3**	**Understand the installation steps and creating basic reports.**	**Installation of Hyperion** Analyzer Setting up environment. Hyperion Analyzer Overview.
2	**Day 12 Hour 1**	**Designing web reports**	**Creating Basic reports**
	Day 12 Hours 2	**Practice # 1** • **Designing basic reports** • **Report with filters**	
	Day 12 Hours 1	**Self learning**	Visiting forums and identifying the real time implementation of Hyperion Analyzer reporting. Designing basic reports and sample reports.
	Day 12 Hours 1	**Quiz & Discussion.**	**Identifying the needs of developing Analyzer reports and integrating with Essbase Database.**
3	**Day 13 Hour 2**	**Designing Custom Reports**	Designing Pinboards, Custom reports, HTML Web Clients
	Day 13 Hours 1	**Designing Advance Reports**	Designing Advance and Relational reports.
	Day 13 Hours 1	**General Analyzer Administration**	Administration Tools
	Day 13 Hours 2	**Practice#** • **Customizing reports** • **Designing pinboards** • **HTML Web clients** • **Designing Advance and Relational reports.** • **Report Administration.**	
	Day 13 Hours 1	**Self Learning**	**Identifying technical issues and sample case study.**
	Day 13 Hours 1	**Technical Discussion**	Discussion about common issues and technique follows while report creation.
	Multiple Choice Questions (Day 12- Day 13) • **Hyperion Analyzer Concepts** • **Designing web reports** • **Hyperion Analyzer Advance Designing**		



****Note : This case study is now part of Essbase Training.

Session #	Date and Time	Area of Focus	Session Topics
1	**Day 14 Hours 2**	**Understanding Business Requirements**	Explaining sales tracking system process flow diagram, various entities involved Draw ER Diagram.
2	**Day 14 Hours 6**	**Analyzing the current system and plan for the Database Outline**	Writing SRS and process flow diagram. Technical documentations(HLD LLD)
3	**Day 15 Hours 4**		
4	**Day 15 Hours 4**	**Dimensional Modeling Basics Process for designing a Database**	Design Data Model. Identifying Dimensions, Members, Measures (Fact Table), DWH Operations. Writing documentations for the all the above.
5	**Day 16 Hours 8**	**Designing Multidimensional Database Outline & Loading Data from Flat files**	Mapping DWH concept and design model with real time Essbase Outline designing. Loading data from Data Source.
6	**Day 17 Hours 4**	**Customizing Calculation script**	Writing basic calculations scripts for rollup, Actual, Budget, Variance , Margin, Revenue, COGS, Sales , Monthly/Quarterly/Yearly Opening/Closing Inventory ,Expense calculation, Commission, payroll, discount, financial calculations.
7	**Day 17 4 Hours**	**Writing Spread Sheet**	Writing spear sheet reports for Top 'N' Analysis, Sales/Revenue/Margin/Expense reports based on time and market analysis.
8	**Day 18 4 Hours**	**Web Reports**	Writing web reports for Online Analysis
9	**Day 18 2 Hours**	**Essbase Server Administration**	Backing up, restoring users, groups creation
10	**Day 18 2 Hours**	**Essbase Server Optimization and Monitoring performance**	Writing MDX scripts to optimize the data load/Calc script.


Topic # 5 Hyperion Planning
Planning Overview, Dimensions and Data Storage Overview
Setting Up the Period, Scenario, and Version Dimension
Setting Up Entity and Account Dimension,
Loading Metadata from a File and though EPMA Dimension library .
Creating & Customizing Data Forms and Folders
Entering Data on the Web & Smart View
Managing the Approval Process and Creating Task Lists
Creating Business Rules and Building Runtime Prompts, Adding Formulas
Creating Basic Reports
Adding Auto Calculations and Mathematical Functions
Creating, Manipulating and Distributing Web Analysis Documents

Session #	Date and Time	Area of Focus	Session Topics
1	**Day 19 Hours 1**	**Planning Overview, Dimensions and Data Storage Overview**	**Planning Overview** Hyperion System 9 Overview Hyperion System 9 Planning Relationship Between Planning and Essbase Analytics Essbase Analytics Terminology Navigating the Planning Web Client
2	**Day 19 Hour 1**	**Planning Dimensions and Data Storage Overview**	**Planning Dimensions and Data Storage Overview** Planning Dimensions Overview Required Dimensions User-Defined Dimensions Dense Dimensions Sparse Dimensions Data Block Creation Process Selecting Aggregation, Data Storage, And Calculation Options
3	**Day 19 Hour 1**	**Dimension creation**	**Setting Up the Period, Scenario, and Version Dimension** • Time Periods Overview • Period and Year Dimensions • Setting up Dynamic Time Series • Choosing How Data is Stored • Scenario Dimension and Creating Scenarios • Version Dimension and Creating Versions
4	**Day 19 Hour 1**	**Loading Metadata**	**Loading Metadata from a File** • Time Periods Overview • Period and Year Dimensions • Setting up Dynamic Time Series • Choosing How Data is Stored • Scenario Dimension and Creating Scenarios • Version Dimension and Creating Versions
5	**Day 19 Hour 1**	**Creating and Customizing Data Forms and Folders**	**Writing Data Forms** Data Forms and Folders Overview Creating Folder Structures for Data Forms Data Forms Requirements Assigning Access Rights to Data Forms. Managing User Variables Setting Up User Preferences
6	**Day 19 Hours 2**	**Entering Data on the Web Entering Data Through Smart View**	**Entering Data** Submitting Data Using Data Forms Adjusting and Annotating Plan Data Calculating Data in Data Forms Smart View Overview Planning and Smart View

			Navigating Data Forms Entering and Calculating Data Accessing Data Offline Essbase Analytics and Smart View Performing Ad Hoc Analysis
	Day 19 Hours 2	**Practice # 1** **Creating sample application.** **Creating and customizing Data Forms** **Entering Data using Smart View and Web**	
7	**Day 19 Hours 1**	**Self Learning, Quiz and discussion.**	
8	**Day 20 Hours 2**	**Creating & Building Runtime Business Rules**	**Creating Business Rules** Business Rules Overview Navigating Business Rules Business Rules Creation Process Launching Business Rules from the Web Printing Business Rules Runtime Prompts Overview Adding Runtime Prompts
9	**Day 20 Hours 2**	**Adding Formulas to Business Rules Process Management**	**Writing Formulas** Adding Auto Calculations to Data Rows and Columns Mathematical Functions and Properties Mathematical Operators in Expressions Formula Rows, Columns, and Cells Common Mathematical Functions Process Management Overview Managing Review Cycles for Planning Units Copying Data Between Versions
10	**Day 20 Hours 2**	**Practice # 2** • **Building Business Rules** • **Adding formulas**	
11	**Day 20 Hours 2**	**Self Learning and Quiz**	
12	**Day 21 Hours 4**	**Creating Report Objects Adding Text Functions**	**Creating Reports** Report Objects Overview Creating Text Boxes and Adding Images Saving and Inserting Report Objects Linking Report Objects Designing Headers and Footers Text Functions Overview Inserting Text Functions in Text Boxes, Headings, and Text Cells Creating Dynamic Values with Current Keywords Common Text Functions
13	**Day 21 Hours 2**	**Reviewing Planning Data with Web Analysis** **Creating, Manipulating and Distributing Web Analysis Documents**	**Integrating With Web Analyzer** Web Analysis Architecture Key Benefits of Web Analysis Key Concepts Navigating Workspace and Web Analysis Studio Workspace and Web Analysis Studio Tasks Defining Queries Setting Document Format Options Creating Chart Views

			Navigating Documents Manipulating Data Distributing Web Analysis Content
		Managing the Approval Process and Creating Task Lists	**Managing the Approval Process and Creating Task Lists** Managing the Review Cycle for Planning Units Copying Data Between Versions Copying Data Navigating Task Lists Task List Creation Process Building Task Lists and Assigning Access to Task Lists Validating Task Lists Reporting on Task Lists
14	**Day 23 Hours 2**	**Practice # 3 Creating Reports** • **Navigating using Web Analysis.**	
15	**Day 23 Hours 2**	**Self Learning**	Visiting forums and identifying common issues and errors during
	Multiple Choice Questions (Day 19- Day 21) • **Planning Overview** • **Dimensions and Data Storage Overview** • **Creating and Customizing Data Forms and Folders** • **Enter Data using Web/Smart View** • **Building Business Rules** • **Integration With Web Analysis**		

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