

COURSE SCHEDULE OF IS/IT COURSES

MS Access

Day	Session 1		Session 2	Session 3	Session 4
1	Inauguration:	Introduction to MS Access objects: Description of various objects in MS-Access; Creating tables. Working with tables. Adding fields, modifying fields, combo boxes, list boxes, validations, Insert data, Update data :	Introduction to MS Access objects: Description of various objects in MS-Access; Creating tables. Working with tables. Adding fields, modifying fields, combo boxes, list boxes, validations, Insert data, Update data :	Joins and Referential integrity: creating joins, editing joins, different kinds of referential integrity. Sorting, Filtering :	Joins and Referential integrity: creating joins, editing joins, different kinds of referential integrity. Sorting, Filtering :
2	Working with Queries, Creating queries, Modify queries, Basic expressions and functions :		Working with Queries, Creating queries, Modify queries, Basic expressions and functions :	Cross tab queries, Find duplicates, Grouping queries, Make Table, Append, Update, Delete :	Cross tab queries, Find duplicates, Grouping queries, Make Table, Append, Update, Delete :
3	Re-capitulation of database concepts; Introduction to SQL: Basic SQL statements SQL statements :		Re-capitulation of database concepts; Introduction to SQL: Basic SQL statements SQL statements :	Functions in MS Access; Practice session :	Functions in MS Access; Practice session :
4	Group By queries, Joins :		Group By queries, Joins :	Sub queries, Practice Session :	Sub queries, Practice Session :
5	Creating Forms, Adding Date, Time fields, Calculated fields, Sub-forms :		Creating Forms, Adding Date, Time fields, Calculated fields, Sub-forms :	Forms Case Study , Working with Reports :	Forms Case Study , Working with Reports : Valediction :

All India Seminar on Digitization of Payments in Public Finance

Day	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7
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1	Inauguration	Introduction to Blockchain technology how it works; Use cases of blockchain technology in Public finance and Government departments	Blockchain technology in Treasury management system, Government of Karnataka	Overview of Payment Systems	Digital Payments, Modes of Payments, Frameworks of payments	Risks and Mitigation measures in payments, Safeguards and Regulatory Instructions	Valediction
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Advanced SQL/PLSQL

Day	Session 1	Session 2	Session 3	Session 4
1	SQL Refresher: Select, Where, Group by, Order by, Handling NULL values, Functions	SQL Refresher: Sub queries, Correlated subqueries, Joins	Analytical queries: Over, Order by, Partition by, Sum, Rank, Analytical function in where clause	Analytical queries: First_value, Last_value, Window Clause, Lead, Lag
2	Hierarchical Queries: Connect by, start with, Level, prior and siblings, sys_connect_by_path	Hierarchical Queries: Connect by, start with, Level, prior and siblings, sys_connect_by_path	PL SQL Blocks and procedures: Block structure, variables, sequence, decision & iteration, exception handling, output, procedures, inputs and outputs, invocation.	PL SQL Blocks and procedures: Block structure, variables, sequence, decision & iteration, exception handling, output, procedures, inputs and outputs, invocation.
3	Functions and Packages: Review of Procedures, Case structure in PL/SQL block, Cursors-two methods, Recordtype variable	Functions and Packages: Create functions, difference between function and procedure, Invocation of functions	Triggers: Packages- Create and use	Triggers: Row level and statement level triggers, before and after images, restrictions on triggers.

Oracle as Data Analysis Tool

Day	Session 1	Session 2	Session 3	Session 4	
1	Inauguration	Introduction to Database Management System, Database objects, Constraints-Primary key, Foreign key, Check	Connecting to Oracle, Introduction to SQL, Basic SQL statements-Selecting all Fields, Selecting particular fields, Where clause	Operators in SQL statements; Dual table, Distinct clause, Order by clause	Exercises

2	String and Numeric functions	Conditional functions	Date functions	Group by clause
3	Subqueries, Correlated subqueries	Sets	Joins	Practice sessions
4	DDL statements	DDL statements	DML statements	Practice sessions
5	Importing/Exporting data in Oracle	Analysing a few system tables	Analysing a few system tables	Practice sessions
6	Case studies-Group exercises	Case studies-Group exercises	Presentation of Analysis by groups	Presentation of Analysis by groups

Data Analytics with Tableau

Day	Session 1	Session 2	Session 3	Session 4
1	Introduction to Data analytics and visualization techniques, Processes and Tools in data analytics	Basic statistics Theory- Mean, mode, median, Range, Variance, Quartiles, Interquartile range, Histograms	Connecting Tableau to Data – CSV and Excel files Navigating Tableau; Menus in Tableau; Data types; Dimensions and Measures; Understanding Green and Blue Pills;	Graphs and Charts, Maps in tableau, Adding Colors Adding Labels and Formatting, Creating Calculated Fields; Date & time series, Practice sessions
2	Discussion on using the right Graph/Chart, Working with Time Series; Understanding Aggregation, joins, Granularity, Filters and Highlighting	Levelled bars, Stacked bars, Continuous and Discrete data, Filters , Combined axis and Dual axes charts	Hierarchies , Aggregations in calculated fields, Conditional Functions	Sets and groups; Practice session
3	Table calculations	Level of Detail Expressions	Parameters	Practice session
4	Creating Dashboards and Stories in tableau	Advanced Dashboard Interactivity	Setting up and using ODBC Connections to tableau	Practice session
5	Case study in Tableau- Data sets from data.gov.in and other government data sets- Discussion of ideas by participants	Case study in Tableau- Data sets from data.gov.in and other government data sets- Discussion of ideas by participants	Presentation by participants	Valedictory session

Auditing in IT environment (including IDEA)

Day	Session 1	Session 2	Session 3	Session 4
1	Auditing in IT environment-mandate, processes including important documents to be studied, reporting	Auditing in IT environment-mandate, processes including important documents to be studied, reporting	Introduction to IDEA; Introduction to case study; Importing Excel and CSV files, Field statistics, Summarisation, Filters, Indexing	Extraction-top extraction, simple extraction, Key valueControl total, Group records
2	IT and Application controls	Introduction to Database concepts	Field manipulation	Functions in IDEA
3	Evidence gathering for Application controls Duplicate key detection, exclusion	Evidence gathering for Application controls Duplicate key detection, exclusion	Using data from more than one source-Join, Compare databases	Append databases, Gap detection
4	Auditing in SAP	Auditing in SAP	Sampling and Statistical techniques in IDEA	Sampling and Statistical techniques in IDEA
5	Installing DBMS, Backup and restoring in databases; Importing from DBMS into IDEA	Installing DBMS, Backup and restoring in databases; Importing from DBMS into IDEA	Importing PDF files into IDEA	Importing PDF files into IDEA
6	Group Exercises	Group Exercises	Group Exercises presentation	Group Exercises presentation

MS Word and PowerPoint

Sl. n	Session 1	Session 2	Session 3	Session 4	Session 5
1	Training on MS Word and MS Power Point Inauguration	MS Word Starting and closing an application, Creating new word file, opening and editing existing word files, save and save as operations, Find & Replace with advance options, Go to, close and exit.	MS Word Creating word documents using Microsoft Templates- Modifying and creating Templates, Exploring the available built-in templates viz., Event menu, event flyer, word tour, certificate, etc	MS Word Font/Character Direct formatting. Paragraph Indentation, Alignment, spacing	MS Word Numbering and Bullets. Borders and shading, Page Setup, Tabs
2	MS Word Inserting Table, drawing, inserting Rows/Columns/ Cells. Merging and Splitting of Tables/Cells.	MS Word Formatting the Table, Text Alignment, Mathematical/logical Formulas, Modifying table Layout and design	MS Word Using Styles, Creating and modifying Paragraph/Table styles, Quick style Sets, Colour palette	MS Word Inserting Charts, Types of charts Formatting/updating Charts, Manipulating data for charts, Data table values, select / edit data Chart elements - Legends, data labels Explore Chart format, design, quick layout options	
3	MS Word Graphics Inserting Objects, pictures, Auto shapes Clip Art, Smart art, Text Boxes.	MS Word Footnote, Endnote, Footer, Header, Table of contents, page number, comments Hyperlink concepts Print Layout view, Paper sizes, print options Web Layout view, Outline view	MS Word Restricting permissions for view/edit Password protection, Document inspector	MS Word Revision tracking, formatting and editing restrictions, track changes, Comparing documents	
4	MS Word Exercises in MS Word	MS Word Exercises in MS Word, Quiz	MS Power Point Power point Basics	MS Power Point Power point Basics	

5	MS Power Point Case Study Presentation of Audit reports, Meeting agenda etc	MS Power Point Case Study Presentation of Audit reports, Meeting agenda etc	MS Power Point Exercises on PPT, Quiz	MS Power Point Group Exercises presentation	Training on MS Word and MS Power Point Valediction
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