

ADVANCED DIPLOMA IN DATA ANALYTICS

CERTIFICATE COURSE IN IT & ADVANCED EXCEL WITH DBMS (SEMESTER - I)

INTRODUCTION TO IT

- Hardware • Software • Input/Output Devices • Basic File & Folder Management • Creating Files & Folders
- Organizing Files & Folders • Deleting & Restoring Files • Internet Operations • Downloading Images
- Creating Gmail Accounts • Managing E-mails with Attachments • Screenshot Capture • File Conversions

DOCUMENT CREATION USING WORD

- Text & Document Formatting • Tables • Pictures • Mail Merge • Printing Documents

PRESENTATION DEVELOPMENT USING POWERPOINT

- Text • Images • Designs • Transitions • Animations • Slide Shows • Protecting Documents Using Password
- Practical Computer Skills for Day-to-Day Office Work • Personal Productivity Tasks

EXCEL & ADVANCED EXCEL WITH VBA

- Data Entry • Worksheet Management • Formatting Documents • Text Formatting • Basic Formulas • Chart Creation
- Workbook Protection • IF Function • Nested IF • & Function • OR Function • Text Functions • Date Functions
- Sorting • Filtering • Conditional Formatting • Data Validation • SUMIFS • COUNTIFS • AVERAGEIFS • MAXIFS • MINIFS
- VLOOKUP • HLOOKUP • XLOOKUP • INDEX & MATCH • Database Functions • Financial Functions • CONCATENATE
- SUBSTITUTE • DATEDIF • Pivot Tables • Pivot Charts • Advanced Charts • Dashboards • What-If Analysis • Goal Seek
- Forecasting • Trend Analysis • Data Import • Data Transformation • Data Cleaning • Query Merging • VBA Editor
- Programming Basics • Variables • Data Types • Loops • Macros • Working with Worksheets & Ranges
- Creating User Forms • Form Controls • Validation

DBMS USING ACCESS

- Database Creation, Table Design, Queries, Forms, Reports, Relationships, & Data Management Using Access

CERTIFICATE COURSE IN BUSINESS INTELLIGENCE (SEMESTER – II)

POWER BI FOR DATA ANALYSIS

- Introduction to Power BI Desktop • Power BI Desktop Installation • Connecting Data Sources (Excel, CSV, Web, SQL)
- Data Transformation Basics • Power Query Editor • Filtering • Sorting • Removing Duplicates • Merging Queries • Appending Queries • Column Splitting • Data Formatting • Creating Custom Columns • Relationships Between Tables • Primary Keys
- Foreign Keys • Star Schema • Snowflake Schema • Creating Data Models • Calculated Columns • Measures • Introduction to DAX • DAX Functions • Time Intelligence Functions • Building Dashboards • Charts • Maps • Tables • Slicers • Conditional Formatting • Filters • Drill throughs • Custom Visuals from Marketplace • Sales Data Analysis • Financial KPIs
- HR & Employee Data Insights • HR Analytics Dashboard • Sales Dashboard Creation

DATABASE MANAGEMENT USING MY SQL

- Introduction to Database • MS Access • MySQL • Data Types • Constraints • Primary Key • Foreign Key • Creating Tables
- Changing Tables • Updating Tables • Inserting Data into Tables • Updating Records • Deleting Records • Selecting Records Using WHERE Clause • Comparison & Logical Operators • Wildcard Searching Using LIKE Operator • Aggregate Functions (SUM, AVG, MIN, MAX, COUNT) • GROUP BY Clause • HAVING Clause • Subqueries • Table Joins • INNER JOIN • OUTER JOIN • LEFT JOIN • RIGHT JOIN • UNION • String Functions • SUBSTR • LEN • UPPER • LOWER • CONCAT

BUSINESS CONCEPTS

- Report Making & understanding MIS fundamentals • MIS –Manage & Analyse Business Data

CERTIFICATE COURSE IN DATA ANALYTICS USING PYTHON (SEMESTER – III)

PYTHON FOR DATA ANALYTICS

- Python Introduction & Basics • Datatypes, Variables, Operators, If Else Statement, Iterative Statements • List, Tuple, Sets, Dictionaries, Strings & Functions Related To These Structures • Functions & Scope • Classes & Objects, Constructor, Inheritance, Polymorphism, Encapsulation, Abstraction • Modules & Packages Using Basic Packages • Module - Math, Random, Datetime, OS, JSON, Requests, URLLIB • File Handling With Json & Normal Files Both • NUMPY Module – Array Filtering & STATISTICS • PANDAS Module – DATAFRAME, Filtering, Statistics & More.. • Data Visualization with MATPLOTLIB Module – PLOTTING Graphs, SCIPY Module • SEABORN Module – Plotting Data, Heatmaps, Pair Plots, Distribution Plots • Database Programming with SQL & MONGODB • Statistics Basic – Mean, Median, Mode Variation, Standard Deviation, Correlation • **AI Exposure with SCIKIT-LEARN, JUPITER NOTEBOOK, TENSOR FLOW & HUGGING FACE.**