MVS- DAY1	Class Room Sessions	Overview of MF and S/W supported on MF, BATCH and ONLINE Applications, Characteristics of MF, Advantages of MF, Types of H/W, Different O/S, Subsystems, JES life Cycle, Master Catalog and User Catalogs, MVS Memory Management, MVS DATA Management(Non-VSAM and VSAM), Dataset, Concatenation of dataset, DATABASE types (Hierarchical, Network, Relational), DB2I, SQL, SPUFI, QMF, Tele-Communication, JCL (JOB, EXEC, DD), CICS, IMS, RACF, ISPF/PDF, Virtual Storage, Multiprocessing, Storage, Expanded Storage, Hyperspace, Data Space, Paging, Swapping, SYSPLEX
ISPF-DAY1	Class Room Sessions	• Logon, Logoff, • Creation of PS and PDS, • Allocation Sheet • TSO Line editing Commands • TSO Primary Editing Commands, DSLIST • TSO Command • Utilities (3.1, 3.2, 3.3, 3.4) • SDSF • SUPERC, SUPERCE, SEARCH-FOR
	Lab Sessions	**Practice ALL Commands**
JCL-DAY1	Class Room Sessions	• JOB Statement • JES Life Cycle • Different JCL Statements • Coding Sheet • JOB Statement 1. (A/C info, Pgmr Name, CLASS, MSGCLASS, MSGLEVEL, TYPRUN, NOTIFY, RESTART) • EXEC Statement (PGM, PARM) • DD Statement (DSN, DISP, DCB) • IEBGENER, IEBCOPY, LISTVOC
	Lab Sessions	**Writing JCL for IEBGENER, IEBCOPY, LISTVOC**
JCL -DAY2	Class Room Sessions	• COND • REGION • TIME • STEPLIB, JOBLIB • SYSPRINT • SYSIN, SYSOUT, SYSABEND, SYSUDUMP, DUMMY • SORT, MERGE

	Lab Sessions	• IEHLIST, IDCAMS, REPRO, PRINT, CONCATENATION, IEBPTPCH, **Writing JCL for SORT, MERGE, REPRO, PRINT, CONCATENATION**
JCL-DAY3	Class Room Sessions	• Referback • IEHPROGM, LISTPDS, INCLUDE, SET, • PROCEDURE (Instream & Catalog) • Overriding, Symbolic Parameter • GDG • Modal Commands IF ELSE, MAXCC, LASTCC
	Lab Sessions	**Writing JCL on Instream and catalog procedure, Symbolic parameter, Creation of GDG and Modal Commands**
COBOL-DAY1	Class Room Sessions	• Intro, Coding Sheet • DIVISION • SECTION • PARAGRAPH • SENTENCE • STATEMENT • DISPLAY, ACCEPT • ADD, MULTIPLY, SUBSTRACT, DIVIDE • COMPUTE, MOVE, MOVE CORR • Explanation on RUN JCL and COMPILE JCL
	Lab Sessions	**Writing simple programs using above statements**
COBOL-DAY2	Class Room Sessions	• Edited Clause • PARM passing • VALUE, INITIALIZE • REDEFINE • RENAME • USAGE • EVALUATE • PERFORM Statements
	Lab Sessions	**Writing Programs with above statements**
COBOL-DAY3	Class Room Sessions	• Sequential File processing • OPEN, CLOSE, READ, WRITE • INPUT, OUTPUT, EXTEND, I-O, • FILLER • REPORT Generation with HEADER and FOOTER
	Lab Sessions	**Writing programs with Report TYPE, Opening FILE in different MODE**

COBOL-DAY4	Class Room Sessions Lab Sessions	• Index File Handling (KSDS / ESDS / RRDS) • Access SEQUENTIAL, RANDOM, DYNAMIC **Writing programs on Index file of KSDS / ESDS / RRDS**
COBOL-DAY5	Class Room Session Lab Sessions	• AIX Handling with UNIQUE / NON-UNIQUE key • CONTROL BREAK(SINGLE & DOUBLE) **Writing program accessing index file with Alternate key and Control break**
COBOL-DAY6	Class Room Sessions Lab Sessions	• SORT, MERGE • Selective SORT • SUB-ROUTINE 1. (Call By Reference, Call By Content) • STATIC and DYNAMIC CALL **Writing program on SORT, MERGE and SUB-ROUTINE**
COBOL-DAY7	Class Room Sessions Lab Sessions	• TABLE HANDLING(Single & Multiple), • TABLE SEARCH (Linear and Binary) **Writing TABLE program and SEARCH and SEARCH ALL for table look-up**
COBOL-DAY8	Class Room Sessions Lab Sessions	• STRING HANDLING (STRING, UNSRTING, INSPECT, • FILE BALANCING (Master File & Transaction file Using GDG) **Writing Program on STRING Handling and Master and Transaction Program**
VSAM-DAY1	Class Room Sessions	• VSAM Organization • OS CVOLS, VSAM CATALOGS • KSDS, ESDS, RRDS, LDS • Control Interval • Control Area • CI SPLIT • CA SPLIT • Buffer

		• IDCAMS Utility
		• Define Cluster with
		   1. DEFINE, NAME, CISZ
		   2. FREESPACE
		   3. SPANNED or NOSPANNED
		   4. RECOVERY, IMBED and REPLICATE
		   5. BUFFERSPACE
		   6. RECORDSIZE
		   7. KEYS
		   8.

	Lab Sessions	**Creating VSAM(KSDS, ESDS, RRDS), REPRO, PRINT**
VSAM-DAY2	Class Room Sessions	• AIX creation with UNIQUE and NON-UNIQUE • BLDINDEX • PATH • REPRO • PRINT • ALTER • REUSE • EXPORT, IMPORT • MAXCC, LASTCC • DELETE • LISTCAT •
	Lab Sessions	**Creating AIX, BLDINDEX, PATH, PRINT**

DB2-DAY1	Class Room Sessions	• Database Concept (Hierarchycal / Network / Relational) Database
		• Database Objects (Storage Group, Database, TableSpace, Table, Index, View, Synonyms, Aliases)
		• System Objects(DB2 Catalog, DB2 Directory, BSDS, Bufferpool, Logs)
		• DB2 Components (System Service, Locking Service, Database Service, Distributed data facility)
		• Relational Database Concepts
		   • Entities, Relations, Tuples
		   • Normalization – 1NF, 2NF, 3NF
		• Terms used in Relational Databases
		   • Tables
		   • Rows

		• Columns
		• Data Types
		• SQL and its Components
		
		SQL BASICS
		
		• SQL Queries
		• Selecting Data from Table
		   • SELECT and FROM clauses
		   • The WHERE clause
		   • Different Predicates
		   • DB2 Specific Operators
		   • Pattern Matching
		• Performing Arithmetic between Columns
		• NULL values
		• Scalar Functions
		• Date & Time Formats
		• Date & Time Functions
		• String Functions
		   • Concatenation
		• Numeric Functions
		• Column or Aggregate Functions
		• Counting in DB2 Tables
		• The GROUP BY clause
		• The HAVING clause
		• The ORDER BY clause

DB2-DAY2	**Lab Room Sessions**
	
	Class Room Sessions
		SUB- QUERIES AND CORRELATED QUERIES
		
		• Sub-Selects and their Application
		• Nesting Sub-Selects
		• Correlated Sub-Select
		
		JOINING DB2 TABLES TOGETHER
		
		• Selecting Data from more than One Table
		• Inner Join
		• Outer Join
		• Left Outer Join
		• Right Outer Join
		• The VALUE function
		• DISTINCT Keyword
		• UNION Keyword
		• VIEW Keyword
		   • Security using Views
		   • Accessing Views
		   • Updating Views
		• Security Levels

| | | - GRANT Statement |
| | | - REVOKE Statement |

DB2 Objects

- Table Spaces , Storage Group
- Index , View , Plan
- Creating and Deleting Objects - CREATE & DROP Statement
- Protecting tables from DROP
- The System Catalog

UPDATING DATA IN A TABLE

- Modifying Data in a Table
  - UPDATE Statement
  - DELETE Statement
  - INSERT Statement
- Restricting the Rows being updated
- Updating Multiple Columns
- Setting Columns to NULL
- Setting Columns to a Value

INSERTING DATA INTO A TABLE

- INSERT Statement
- Inserting NULL Values
- Inserting Default Values
- User Defined Defaults
- Inserting Values from another Table
- Inserting Multiple Rows

DELETING ROWS FROM A TABLE

- DELETE Statement
- Restricting the Delete
- Programming Suggestions for Deleting
- Empty Tables

DB2-DAY3

Lab Room Sessions

Class Room Sessions

EMBEDDING SQL IN AN APPLICATION PROGRAM

- Planning
- Testing the SQL Interactively
- Precompile
- Compile
- Bind
- Link
- Execution of a DB2 Program

DB2-DAY4		**MANIPULATING DATA AND FROM A TABLE**
		
		• The SQLCA
		• The DCLGENs
		• Handling Exceptional Conditions
		   • SQLCODE
		   • WHENEVER Statement
		• EXEC SQL Statement
		• Host Variables
		• INTO Statement
		• NULL Indicator
		• Selecting One Row

	Lab Room Sessions Class Room Sessions	

		• Selecting and Returning Multiple Rows
		   • The CURSOR Statement
		   • DECLARE, OPEN, FETCH & CLOSE the Cursor
		   • Check for NULL Values
		   • The UPDATE Statement
		   • Cursor controlled Updates
		   • Cursor controlled Deletes

		REFERENTIAL INTEGRITY
		
		• Using DB2 RI Facilities
		• Primary and Foreign Keys
		• Cascade Deletes and Updates
		   • ON DELETE Statement
		   • Restrict, Cascade and Set Null options
		   • UPDATE Statement

DB2-DAY5		
	Lab Room Sessions Class Room Sessions	
		DYNAMIC SQL **ADVANCED DB2 (Introduction)** • DRDA • Stored Procedures • Roles of Client & Server • Scrollable Cursors • Insensitive cursors • Sensitive cursors • User define Function • Trigger
CICS - DAY1	Class Room Sessions	**INTRO TO CICS**

	Lab Sessions	• Macro & Command Level
		• Introduction—Online & Batch Applications.
		• Types of Conversation
		  1. Non Conversation
		  2. Conversation
		  3. Pseudo Conversation
		• Pseudo Conversational Programming, Multitasking, Multi threading, Transaction and Tasks
		• CEDA, CECI, CEMT, CEBR, CESN, CESF
		• Compilation Process
		
		Writing Simple CICS program with SEND & RECEIVE command & PCT & PPT Entry

CICS - DAY2	Class Room Sessions **Lab Sessions**	**BMS** • Creation of Maps / Map Sets • Symbolic and Physical maps • Attributes---Coding and their significance • Cursor Positioning (Static & Dynamic) • MDT • SEND MAP & RECEIVE MAP **Coding a CICS/COBOL program**

CICS - DAY3	Class Room Sessions
	
	Lab Sessions
		FILE HANDLING
		• File Handling/File control commands
		• EIB (Execute Interface Block) / DFHCOMMAREA
		• Link/XCTL/RETURN(Program control commands)
		• Terminal Handling techniques
		  1. PF KEYS/AID
		  2. Handle Condition/Ignore
		  3. Response code
		
		Program Accessing VSAM KSDS file

CICS - DAY4	Class Room Sessions	**FILE HANDLING**

		• File Accessing thru AIX • VSAM KSDS , ESDS, RRDS
	Lab Sessions	**Program Using AIX**
CICS - DAY5	Class Room Sessions	**TSQ & TDQ** • Accessing DB2 Tables thru CICS • CICS Abends and their interpretation
	Lab Sessions	TSQ & TDQs & Accessing From DB2 table