M.B.A. Computer Courses

Semister I

105. Elements of Information Technology

1. Computer :
Block Diagram of elements of digital computer-their functions.
Memory, CPU, I-O devices, Secondary storages, Magnetic tape, Disk, CD-ROM.
Other recent development - scanners, Digitizers, Printers, Hardware and Software.
Micro, Mini and Main-Frame Computers-their features (4)

2. Representation of Data :
Binary, Octal, Hexadecimal, BCD, EBCDIC, ASCII, Conversions, Simple additions, Subtractions, multiplications, Divisions (2)
(in Octal and Hexadecimals)

3. Introduction to 8085/8088 microprocessor:architecture, Super-Data, Address, Control.

4. Software :
Introduction to Programming, Flowcharts and Algorithms.
System Software, application software, firmware.
Machine, Assembly, and Higher Level Languages Cobol, C, C++ Java.
Stored program concept. (8)

5. File :
Concept of file.
File organisation and accessing techniques-Indexed, Line sequential, Hashed. (3)
File Handling functions : Sorting, Merging, Indexing, Updating.

6. Instructions and Adressing Techniques :
Instructions execution cycle.
Direct, Indirect, Relative, Paging, Indexed. (2)

Semester - II

I FOXPRO

1. UNDERSTANDING DATABASE

2. BULDING A DATABASE
   creating a record structure, Entering Data

3. SEARCHING THE DATABASE
   Locating Record with conditions

4. SORING THE DATABASE
   sort & index

5. EDITING & MODIFYING THE DATABASE
   Editing with Edit, Browse, deleting Record, Modifying the Database Structure.

6. CREATING & PRINTING FORMATTED REPORTS
   Creating, Modifying & Printing Reports and Labels Printing Totals & Sub-totals in Reports, Summary Reports

7. MANAGING NUMBERS & DATES
   Summing, Averaging Numbers, Counting Record, Date Commands.

8. MANAGING MULTIPLE DATA FILES
   Opening Multiple databases, specifying Relationship, Printing a report from two databases, Master File & Transaction file , Updation

9. UNDERSTANDING MEMORY VARIABLES
   Managing data in the RAM, Storing data with STORE

10. CREATING COMMAND FILES
    Creating & Running Command files, Setting up loops in Programs with DO WHILE... ENDDO.

11. MAKING DECISIONS
    Making decision with IF..ENDIF, ENDDO.

12. COMMAND TO BE COVERED
    ACCEPT, INPUT, ACTIVATE/DEFINE MENU, DEFINE PAD, ACTIVATE/DEFINE POPUP, DEFINE BAR, ACTIVATE/DEFINE WINDOW, ACTIVATE SCREEN, APPEND, AT(@)-MENU, PROMPT, ROW, COL, AVERAGE, BROWES, CALCULATE, CANCEL, CHANGE, CLEAR, CLOSE, COPY, COUNT, CREATE, DELETE, RECALL, PACK, DIMENSION, DIR, DISPLAY, DO, EDIT, EJECT, ERASE, ZAP, FIND, SEEK, FOR, GO TOP/BOTTEM, SKIP, IF, ELSE, ENDIF, INDEX, REINDEX, INSERT, LOCATE, CONTINUE, MENU, MODIFY, print statement (?, ??), PROCEDURE, QUIT,RENAME, REPLACE, RUN (!), SAVE SCREEN, RESTORE SCREEN, SAY, GET, SELECT, SET Commands, SORT, STORE, RELEASE, SAVE, RESTORE, SUM, TOTAL, UPDATE, USE, WAIT.

13. FUNCTIONS TO BE COVERED
    a. String Functions:
    ASC, CHR, CTOD, DTOC, INT, LEFT, LEN, LOWER, LTRIM,

REPLICATE, RIGHT, SPACE, STR, SUBSTR, TRANSFORM, TRIM
b. Numeric Functions:
ABS, INT, MAX, MIN, MOD, PI, PV, ROUND, SQRT, VAL
c. Logical Functions:
BOF, DELETED, EOF, FOUND, LIF

PRACTICALS (INTERNAL ASS.)

8. Programs based on the above topics. which should include at least on complete menu driven program.

Semester III

306. Programming in 'c'

I. PROGRAMMING IN C LANGUAGE

1. INTRODUCTION & HISTORY.

2. TYPES, OPERATORS, AND EXPRESSIONS
Variable Names, Data Types & Sizes, Constants, Declaration, Arithmatic Operations, Relational & Logical Operators, Type Conversions, Increment & Decrement Operators, Bitwise Operators, Assignment Operators & Expressions, Conditional Expressions, Precedence and Order of Evaluation

3. CONTROL FLOW
Statements & Blocks, If-Else, Else-If, Switch, Loops-While and For, Loops-Do-While, Break and Continue, Goto and Labels

4. FUNCTION AND PROGRAM STRUCTURE
Basic of Functions, Functions Returning Non-Integers, External Variables, Scope Rules, Header Files, Static Variables, Register Variables, Block Structure, Initialization, Recursion, The C Preprocessor

5. POINTERS & ARRAYS
Pointers & Addresseess, Pointers and Function Arguments, Pointers and Arrays, Address Arithmetic, Character Pointers and Functions, Pointer Arrays; Pointers to Pointers, Multidimensional Arrays, Initialization of Pointer Arrays, Pointer vs. Multidimensional Arrays, Command Line Arguments, Pointers to Functions, Complicated Decarations.

6. STRUCTURES
Basics of Structures, Structures & Functions, Arrays of Structures, Pointers to Structures, Self-Referential Structures, Table Lookup, Typedef, Unions, Bit- fields.

7. INPUT & OUTPUT
Standard Input & Output Formatted Output-Printf, Variable-length Argument Lists, Formatted Output-Scanf, File Access, Error Handling-Stderr and exit, Line Input

and Output, Miscellaneous Functions.

Semester IV

404. Business Applications

1. Financial Accounting :
   Introduction to computerised accounting system Coding Methods
   Dy Books, Ledger, Trial Balance, Balance Sheet, Profit and Loss Account.
   Input Countrols- Audit Trail.
   Management and statutory reporting.
2. Fixed Deposit System :
   Types of deposit Schemes-Category or Depositors statutory provisions.
   Interest Warrants and Deposit Register.
   Maturity and Renewal procedures.
   Statutory and Management Reports.
3. Payroll Procesing :
   payslip Printing.
   Statutory Reports such as P.F., E.S.I. and Labour Welfare Fund
   Payment of Bonus.
   Costing and Management and Recording
4. Sales Order Processing :
   Order acceptance and Recording.
   Sales Invoicing.
   Sales Analysis based on Products, Customers and Terms
5. Inventory Managemtn.
   Purchases order processing.
   Stores accounting.
   -Storestansactions-Receipts, Issues and Adjustments.
   -Bin Cards and Stock Leder.
   -Inventory Levels-EOQABC analysis
   Inventory Control Reports such as Slow Moving/Non-Moving Items.
6. Meterial Planning:
   -Bill of Material
   -Computing Gross/Net requirements.