

Certificate Course in INFORMATION AND COMPUTER BASICS

SYLLABUS

Theory	140 Hrs.
Paper 1 : Computer Fundamentals and Network	Hrs
1. Computer Fundamentals	10
Data representation, Data Types, representing Data, Hardware concepts, Main memory, Input and Output in computer.	
2. Computer Software	10
Operating Systems : definition, Evolution, Components. Algorithm : Concepts. Programming Languages : Evolution. Data structures and Abstract Data structures (Definitions only)	
3. MS office Suit	30
Contents of "My Computer" MS World MS Excel MS Power Point	
4. Computer Network	10
Networks, OSI Model, Types of Networks (LAN, MAN, WAN), Connecting Devices, Repeaters, Bridges, Routers, Gateways, Internet and TCP/IP	
5. Number Representation	10
Decimal and binary, Conversions, Integer Representation, Floating point representation, Hexadecimal and octal conversions, Arithmetic operations. Logical Operation.	
Paper 2 : Internet, Database and C language	Hrs
1. Working of Internet and E mail	6
Working of Internet Internet and account and Addressing. Electronic Mail : What is E-Mail, Mail Transfer Protocol, Mail Servers, E-Mail addresses, Structure of E-Mail, Voice Mail and Video Mails operations. Logical operation.	
2. Internet Technology.	6
WWW : Types of Web site, Web pages and Links, URL, Web Server and Proxy Server, Visiting websites, Search engines. Building Web sites: HTML, tags, Multimedia in Web site Hyper links and frames.	
3. Microsoft Access	18
Creating databases, Building Database Tables, Sorting and <i>filtering database</i>	

4. Programming in C	30
Foundation of C	
Decision control Structure, Loop control, Case, Function, Array.	
String Manipulation, Structures and pointers.	
5. Files and I/O in C	10
Files Structures	
Files Manipulation	

Practical

60 Hrs

Paper 1

1. Observing and connecting computer peripherals.
2. Observing motherboard and system setup utilities.
3. Installing an Operating system.
4. Exploring "My computer", Control panel.
5. Creating, Editing and Formatting text in 'MS Word'.
6. Laying out and Designing in 'MS Word'.
7. Tables and Printing in 'MS Word'.
8. Mail merge and Envelop in 'MS Word'.
9. Creating, Editing and Formatting workbook in 'MS Excel'.
10. Using Formulas and Functions and 'MS Excel'.
11. Adding charts and macros in 'MS Excel'.
12. Creating and customizing presentation in 'Power Point'.
13. Charts and Drawing in 'Power Point'.
14. Slide shows and presentation in 'Power Point'.
15. Networking in Windows.

Paper 2

1. To E-Mail and Searching info on web search engines.
2. Creating database and Tables.
3. Creating and Running queries.
4. Using forms.
5. Using Reporting tools
6. Writing a program in C that uses 'if----else' decision structure.
7. Writing a program in C that uses ' While' loop structure.
8. Writing a program in C that uses 'For' loop structure.
9. Writing a program in C that uses 'Switch ----case' statement.
10. Writing a program in C that uses Function calling methods.
11. Writing a program in C that uses Structure.
12. Writing a program in C that counts characters, spaces, tabs and new line in a file.
13. Creating a file copy program in C.
14. Writing a program in C that writes a i/p string into a file and also displays a String from a file.
15. Designing a web page having a table with a picture and a animation as content of the Table.