

## SYLLABUS FOR

**Name: PC Hardware & Networking**

**Course Duration – 80 hours**

### **ALLOCATION OF TOTAL HOURS FOR EACH CHAPTER:**

Sl No	Chapter	Theory in Hours	Practical in Hours
1.	Introduction about computer	2	2
2.	Basic Networking concepts	6	10
3.	Introduction to various networking devices	4	4
4.	Inside the PC	4	4
5.	Network basic and configuration	4	15
6.	Introduction to servers and network security	10	15
		30	50

### **DETAILED SYLLABUS**

1. Introduction about Computer
  - 1.1. Basics of computer
  - 1.2. Organization of computer.
  - 1.3. Software and hardware.
  - 1.4. Input/output devices.
2. Basic networking concepts,
  - 2.1 Network topologies:
    - 2.1.1 LAN, WAN, MAN, PAN, CAN.
  - 2.2 Networking Model
    - 2.2.1. The OSI model
    - 2.2.2. TCP/ IP Model
  - 2.3 Network adapters.
  - 2.4 Introducing protocols.
  - 2.5 Cabling and troubleshooting.

3. Introduction to various networking devices:
  - 3.1. Routers.
  - 3.2. Switches.
  - 3.3. Modems.
  - 3.4. Hubs etc.
  - 3.5. Wired and Wireless technology.
4. Inside the PC:
  - 4.1. Opening the PC and identification.
  - 4.2. Study of different blocks,
  - 4.3. Assembling and disassembling.
5. Network basic and configuration:
  - 5.1. Setting IP addresses,
  - 5.2. Sharing files and folders.
  - 5.3. Network troubleshooting.
  - 5.4. PING test, ipconfig etc.
6. Introduction to servers and network security
  - 6.1. Types of servers:
    - 6.1.1. Files servers,
    - 6.1.2. Email Servers,
    - 6.1.3. Proxy servers etc.
  - 6.2 .Basics of Internet and Intranet:
  - 6.3 .Types of Internet connections:
    - 6.3.1 Dialup, Broadband, Leased Line, Wi-Fi, Wi-Max, 2G, 3G, 4G, WWW, E-mails, Search Engines, Social Networking.
    - 6.3.2 Cloud application.
    - 6.3.3 Audio-video Conferencing.
    - 6.3.4 Voice over Internet Protocol (VOIP).
  - 6.4. Recovery and backup.
  - 6.5. Essential security measures.

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