Computer Hardware & Networking

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.