

## EDGE– Networking Syllabus



### **1. PC architecture**

Overview of hardware, PC, DOS commands (Internal & External)

### **2. Motherboard & CPU**

MB architecture, Types of MB, Types of Processor, Cache memory

### **3. BIOS & Memory**

Boot Sequence, BIOS settings, Types of ROM, Types of RAM, Virtual memory

### **4. Hard disk**

Types of BUS, Types of HDD, Jumpersetting, SATA, PATA, SCSI

### **5. Storage Devices**

CDROM, DVD, DAT, ZIP, TAPE, USB Flash, Pen drive

### **6. PC Assembling**

Assembling, Hardware Installation, Connecting Peripherals, CMOS Setting, OS installation, Device Manager

### **7. Add on Cards, slots, Modem**

AGP card, NIC, Display card, Sound card, Modem(Int. & Ext.) Installing Drivers

### **8. SMPS**

Working of SMPS, types of connectors Output of SMPS, Troubleshooting

### **9. Printer**

Dot Matrix, Inkjet, Laser jet, Thermal Printers architecture, Installing printer

### **10. OS Installation**

Partitioning Hard disk, and Installing Win98, Win XP, Win7 & Office 2007

### **11. Virus & Antivirus**

What is virus? Antivirus, Cleaning files, Quarantine, Internet worms

# N+

## 1. Network fundamentals

Network Elements – LAN, WAN, CAN, MAN, PAN. Physical Topology – BUS, STAR, RING, MESH.

## 2. Physical Media

Installing & configuring NIC, Cable Media-  
Coaxial, Twisted-Pair, Fiber-Optic

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## 3. Crimping & Connecting Devices

Crimping, color code, RJ-45, Hub, Switch, Bridge, Router, Gateway.

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## 4. OSI Model

OSI model's Lower & Middle Layers.  
Datagram, Segmentation, Packet, Fragmentation, Windowing etc.

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## 5. Cont...

OSI model's Upper Layers.  
Network Protocols – TCP/IP, IPX/SPX, NetBEUI, AppleTalk.

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## 6. TCP/IP Fundamentals

Brief History of TCP/IP, network interface,  
Internet, Transport, application layers

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## 7. Cont...

TCP/IP utilities, ping, IPConfig, Hostname, Tracert, ARP, Telnet etc.

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## 8. IP addressing & Subnetting

Class A, B, C of IP addresses, Range of Class, Subnetting, and CIDR.

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## 9. Network OS

Installation of Win 2008 Server, Network Security, Firewall, Encryption, Security Policies

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## 10. Fault Tolerance & Disaster Recovery

Power management, disk volume backup  
Virus Protection, Service pack, Hot fix,  
Patch Network troubleshooting.

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## 11. Practice/Doubt Solving Session

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# Mail Management

## **1.Email & POP**

What is Email? Email Client, Email Format,What is POP, Purpose of POP?

## **2.Outlook Express**

Configuring Outlook, E-mail accounts, Importing Items to outlook, Import / Export of messages or address book in outlook.

## **3.Microsoft Office Outlook**

Difference between Outlook express & MS outlook,Configuring E-mail accounts

## **4. Practice/Doubt Solving Session**

# CCNA

## 1. Internetworking

- Internetworking Basic and OSI Model.
  - OSI and TCP/IP Comparison.
  - Cisco three-layer Hierarchical Model.
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## 2. Cisco IOS

- Cisco IOS
  - Cisco Router User Interface Basics.
  - Connecting to Cisco Devices.
  - CLI & Basic Router Commands.
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## 3. Managing a Cisco Internetwork

- Internal Component of Cisco Router.
  - Router Booting Sequence.
  - Managing & Configuring Registers.
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## 4. Cont...

- Backing & Restore Cisco IOS.
- Backing & Restoring the Cisco Router configuration.

### IP Routing

- Routing Basics.
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## 5. Cont...

- Static Routing Features and Operation.
  - RIP Routing Features and Operation.
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## 6. Virtual LANs

- Overview of VLANs.
  - Configuring and Verifying VLANs
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## 7. Internet Protocol Version 6

- Introduction to IPV6
  - The Benefits and Uses of IPv6.
  - Type of Address and Special Address.
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## **8. Cont...**

- How IPv6 Work.
- Configuring Cisco Routers with IPv6.
- IPv6 Routing Protocols.

## **9. Practice/Doubt Solving Session**

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