



# SHREE H.N.SHUKLA COLLEGE OF I.T. & MGMT. (AFFILIATED TO SAURASHTRA UNIVERSITY)

2 – Vaishalinagar,  
Nr.Amrapali Railway crossing  
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## NETWORK BCA SEM 4 UNIT 1

### Ch - 1

2 marks

- 1 – What is network?
- 2 – Explain File services.
- 3 – Explain Print services.
- 4- Explain Database services.
- 5-Explain polling.
- 6- What is network topology? List all topologies.

3 marks

- 1 –Explain communication methods.
- 2- Difference between ring topology and star topology.
- 3- Explain CSMA/CD and CSMA/CA media access method.
- 4-Explain Token passing method.
- 5- Explain ethernet method.

5 marks

- 1 – Explain peer to peer and client server network
- 2 – Explain CDDI and FDDI advanced network methods.
- 3 – List all the network services and explain security and communication services.

### Ch -2

2 marks

- 1 – List all the layers of OSI reference model.
- 2 – Explain about encryption.
- 3 – Explain about compression.
- 4- Write a note on disk quota.

3 marks

- 1 - Explain mapping of network drive in LAN.
- 2 – Explain netmeeting with steps.
- 3 - Explain software layers of osi reference model.
- 4 – Explain hardware layers of osi reference model.

5 marks

- 1 – Explain about OSI ref. model and discuss any 2 layers of OSI ref. model.
- 2 - Explain TCP/IP model with four different layers.



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## UNIT 2

Ch. – 3

2 marks

- 1- What is transmission media?
- 2- Difference between guided media and unguided media.
- 3 – Explain about radio wave signal.
- 4- Explain about fiber optics cable.
- 5 – Write a short note on bluetooth technology.

3 marks

- 1 - Explain classification chart of transmission media.
- 2 – Explain Microwave and Infrared signals.
- 3 – Write an advantages and disadvantages of twisted pair cable.
- 4 – Explain coaxial cable with its types.
- 5 – Define following network terminology.  
1 – Attenuation 2 – Noise 3 – EMI

5 marks

- 1 – Explain Cable media with all types of cable in detail.
- 2 – Explain wireless media in detail.
- 3 - Explain characteristic of transmission cables.
- 4 – Explain UTP twisted pair cable and Explain crimping codes for twisted pair cables.

Ch – 4

2 marks

- 1 - What is multiplexing?
- 2 – What is Demultiplexing?
- 3 – List types of Multiplexing.

3 marks

- 1 – What is switching? List all switching methods.
- 2 – Explain Frequency and wavelength of VHF, ULF and EHF.
- 3 – Write a difference

5 marks

- 1 - Explain FDM in detail.
- 2 – Explain TDM in detail.
- 3 – Explain Circuit switching in detail.
- 4 – Explain about message switching concepts.
- 5 – Explain WDM and CDM in detail

Ch – 5

2 marks

- 1 – List all layer 1 devices.
- 2 – List all layer 3 devices.



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- 3 – Explain network printer in short.
- 4 – Write a note on gateway.
- 5 – Write a note on brouter.
- 6 – Difference between router and layer 3 switches.

3 marks

- 1 – Explain about wireless access point.
- 2 – Explain bridge with types.
- 3 – Explain switch with types.
- 4 – Explain Modem in brief
- 5 – Explain DSL and ADSL.

5 marks

- 1 - List layer 1 devices and explain about hub.
- 2 – Difference between repeater and switch.
- 3 – Difference between router and brouter.

## UNIT 3

Ch – 6

2 marks

- 1 – What is packet? Explain in short.
- 2 – What is protocol? List out various protocols.
- 3 – Explain Appletalk protocol.
- 4 – Explain ARP in short.
- 5 - What is protocol stack or protocol suite?

3 marks

- 1 – Difference between connection oriented and connection less protocol.
- 2 – Explain TCP in detail.
- 3 – Write a short note about UDP.
- 4 – Explain HTTP and FTP in network.
- 5 – Explain netbios protocol
- 6 – Explain L2CAP and RFCOMM protocol in short.

5 marks

- 1 – Explain IPX/SPX in brief.
- 2 – Explain SMTP and POP3 protocols.
- 3 – Explain about TCP/IP protocol stack in brief.

Ch - 7

2 marks

- 1 – What is routing? list all different types of routing.
- 2 – Explain about administrative distance.
- 3 – Requirements of routing.
- 4 – Classification chart of routing.

3 marks



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- 1 – Different between static routing to dynamic routing.
  - 2 – Explain Administrative distance value of various protocols.
  - 3 – Explain RIP protocol in detail.
  - 4 – Explain OSPF protocol in brief.
  - 5 – Explain BGP as an exterior routing protocol.
- 5 marks
- 1 – Explain distance vector routing protocols with its all types.
  - 2 – Explain link state routing protocols and discuss IS-IS in detail.

## UNIT 4

Ch – 8

2 marks

- 1 - What is ip address? Explain static and dynamic ip address.
- 2 – What is ping utility explain in short.
- 3 – Explain about loop back address.
- 4 – What is subnetmask explain in short.
- 5 – Explain supernetting process.

3 marks

- 1 – Explain unicast, multicast and broadcast ip address.
- 2- Explain types of ipv6 address.
- 3 – Note down steps of migration process from ipv4 to ipv6.
- 4 – Explain about subnetting with its types.

5 marks

- 1 - Explain class structure of ipv4.
- 2 – Explain ipv6 with features.

Ch – 9

2 marks

- 1 – What is active directory?
- 2 - Explain about Organizational unit.

3 marks

- 1 – Write a short note on MMC.
- 2 – Explain domain, tree and forest concepts in short.
- 3 – Explain security and auditing.
- 4 – Explain event logging policy.

5 marks

- 1 – Installation steps of 2008 server enterprise edition.
- 2 – Explain components of active directory.
- 3 - Explain about users in 2003 server and note down the steps of how to create user in active directory.
- 4 – Explain about group with types in windows 2003 server.
- 5– How to install active directory in windows 2003 server write down with steps.



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## CH 10

2 marks

Explain following terminology

1 - Security poicy, 2-Guideling, 3-Baseline, 4-Procedure, 5-Standard

2 – Explain Domino effect.

3 – Explain about threat in short.

3 marks

1 – Write a note on information security.

2 – Explain security in WHEELS.

3 – Explain hash function in detail.

5 marks

1 – Explain fundamental of network security.

2 – Explain requirements of network security.

3 – Explain encryption with types.

4 – Explain cryptography in brief.

5 – Explain authentication with types.

6 – Explain CIA model.

## UNIT 5

### Ch 11

2 marks

1 – What is internet? Explain in short.

2 – What is URL? Explain in short.

3 marks

1 – What is VPN? List all types of VPN.

2 – Explain lease line applications.

3 – Explain Proxy server in detail.

4 – Write a note on CCTV technology.

5 marks

1 – Explain lease line in detail.

2 – Explain ISDN in brief.

3 – Explain Dial up network in brief.

4 – Explain PPTP in vpn.

5 – Write a short note on L2TP.

6 – What is GPS? Explain applications of GPS.

7 – What is GPRS? Explain in detail.



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