**TCP/IP TECHNOLOGY**

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## UNIT I
## INTRODUCTION

Protocols and standards - OSI model - TCP / IP protocol suite - addressing - versions - underlying technologies.

## UNIT I I
## IP ADDRESSES, ROUTING, ARP AND RARP

Classful addressing 0 other issues – subnetting – supernetting – classless addressing – routing methods – delivery – table and modules – CIDR – ARP package – RARP.

## UNIT I I I
## IP, ICMP, TGMP AND UDP

Datagram – fragmentation – options – checksum – IP package – ICMP – messages, formats – error reporting – query – checksum – ICMP package – IGMP – messages, operation – encapsulation – IGMP package – UDP – datagram – checksum – operation – uses – UDP package.

## UNIT IV
## TCP, UNICAST AND MULTICAST ROUTING PROTOCOLS

Services – flow, congestion and error control – TCP package and operation – state transition diagram – unicast routing protocols – RIP – OSPF – BGP – multicast routing – trees – protocols – MOSPF – CBT – PIM

## UNIT V
## APPLICATION LAYER, SOCKETS

Client server model – concurrency – processes – sockets – byte ordering – socket system calls – TCP and UDP client-server programs – BOOTP -DHCP – DNS – name space, resolution – types of records – concept – mode of operation – Rlogin.

**TEXT BOOK**

Behrouz Forouzan, "TCP/IP protocol suite ", 2nd edition, Tata McGrawhill..

**REFERENCES**

Douglas Comer, "Internetworking with TCP / IP" ,Vol – 1, PHI, 2000.