

## **VPMP POLYTECHNIC**

### **Department of Computer Engineering**

### **Advanced Computer Network (4350706)**

#### **IMP Questions**

1. Explain IPV4 Classful addressing in detail.
2. Explain CIDR notation.
3. Explain Network Address Resolution /Translation (NAT).
4. Explain IP v4-Datagram Format (IPV4 Header).
5. Explain ICMP v4 Messages (Types, Format) and ICMP v4 Debugging tools.
6. Any Subnetting Example - Find the subnet mask, First address, Last address of given IP address.(Practical-01).
7. Compare IPv4 and IPv6.
8. Explain address space allocation of IPv6 address.
9. Explain auto configuration and renumbering. Also give benefits of it.
- 10.Explain significance of the fields of IPv6 Packet Format (Explain IPV6 header).
- 11.Give strategy of Transition from IPv4 to IPv6.
- 12.Differentiate intra and inter domain routing.
- 13.Explain RIP routing protocol. Also Compare RIP and OSPF.
- 14.Explain OSPF routing protocol.
- 15.Explain BGP (Border Gateway Protocol).
- 16.Explain following Routing Algorithms:
  - (i) Distance Vector Routing (ii) Link State Routing (iii) Path Vector Routing
- 17.Explain significance of the fields of UDP (Explain UDP Header).
- 18.Explain various UDP services and features. Explain various SCTP services.
- 19.Explain various TCP services. List out different features of TCP.
- 20.Explain significance of the fields of TCP Segment (Explain TCP Header).
- 21.Explain TCP connections (3-way handshaking).
- 22.Describe State Transition Diagram of TCP.
23. Explain significance of the fields of SCTP packet format (Explain SCTP Header).
- 24.Explain WWW and URL.
- 25.Explain HTTP. (Demonstrate the working of HTTP Protocol)
- 26.Explain the working of FTP Protocol./Explain FTP Protocol. Explain FTP connections.

27. Explain the architecture of Electronic mail./Email protocol/Email components.
28. Compare POP3 and IMAP4.
29. Describe MIME protocol.
30. Explain Domain Name System (DNS). [OR Explain DNS in the internet.]
31. Explain Name Resolution (Working of DNS). Also explain DNS message format.
32. Any one Header format example (like IPv4, TCP, UDP, SCTP protocol- for that refer manual practical-02,09).