IMPORTANT TOPICS

1) TCP/IP and OSI Model
2) Network topology
3) Bit rate, baud rate
4) Data and Signal
5) Low pass channel and band pass channel.
6) How do the digital to analog conversion is carried out through ASK, FSK and PSK, explain with diagrams.
7) Different line coding techniques
8) Different networking devices –their working layer(s) and addressing used.
9) Circuit switching and packet switching, Compare and contrast between Virtual Circuit and Datagram packet switching
10) Responsibilities of data link layer, network layer and transport layer.
11) Transmission delay, propagation delay, throughput and efficiency in stop and wait
12) Deduce the expression for calculating the efficiency of stop and wait. How efficiency of Stop and Wait flow control depends on network size and length of data packet?
13) Problems in stop and wait and their solutions.
14) Write the differences between Go-Back-N and Selective Repeat flow control.
15) Single bit error and burst error, checksum, CRC, Hamming code
16) Aloha-pure aloha and slotted aloha, CSMA/CD
17) IP datagram, IP address 192.38.15.12.Write class, Net id and subnet mask of this IP.
18) In an organization given Net Id 192.138.12.0. Now we have to create four subnets. Calculate no of usable host for each subnet, subnet id, broadcast address and subnet masking for each subnet
19) Distance vector routing and link state routing
20) TCP Header structure, Write the differences between TCP and UDP, Explain 3 way handshaking in TCP connection establishment
21) Application layer services
22) FTP,WWW