

Mid-West University
Examinations Management Office

End Semester Examinations 2081

Bachelor level/ B.E. Computer/ 6th Semester

Time: 3 hours

Subject: Computer Network (CO461/CO515)

Full Marks: 50

Pass Marks: 25

- Attempt all the questions
- Figures in the margin indicate full marks.
- Assume suitable values, with a stipulation, if necessary.
- Candidates are required to answer the questions in their own words as far as possible.

1. Why multiplexing is important in computer network? Explain duplex and half duplex. [1+4]
2. Differentiate client server and peer-to-peer model network model. Explain Twisted pair cable standards and its connectors.
3. Describe the functions of OSI Ref. Model. Explain X.25 working. [2.5+2.5]
4. Differentiate between circuit switching and packet switching. Describe the operation of Frame-Relay network with frame format. [2+3]
5. a) What is flow control? Explain Go-back-n ARQ. If a codeword Received = 10010100101 assume even parity, state whether received codeword is correct or wrong, if wrong locate the error bit and correct it. [2.5+2.5]
b) Discuss Flag bytes with byte stuffing. Explain CSMA/CD with its flowchart and frame format. [2+3]
6. a) What is TCP model? List the type of ip address and Explain IPV4 Headers with its features [2+3]
b) How can you dedicate 30, 55, 10, 21 public IP address to the departments A, B, C, and D respectively form the given address pool 202.5.19.0/24? Calculate the range of IP addresses, Broadcast Address, Network Address and Subnet mask for each department. [3]
7. Define routing and list the type of routing protocols. Compare operation of shortest path routing with flow based routing. [2+3]
8. Describe network management. Explain frame format of TCP and UDP. [2+3]
9. Describe DHCP protocol and Explain how does electronic mail service using SMTP along with POP. [2+3]
10. Write Short notes on (*Any one*): [2]
 - Network Devices Hub, Switches
 - Socket cell

The End