

NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS
I Semester MCA 'A' Section – 20MCA14 - Computer Networks
Session: January 2021 – April 2021
Assignment Questions

Assignment 1:

Submission Date: 9.2.21

Q.No.	Questions	Marks	Level	COs
<u>Group 1</u>				
1	Illustrate the architecture of ISO-OSI model With neat diagram by mentioning Protocols at each layer.	10	L3	CO1
2	Calculate the Checksum for the following frames <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> 10011001 11100010 00100100 10000100 </div>	5	L3	CO2
3	Illustrate the Distance vector routing algorithm	10	L3	CO3
4	Discuss DHCP protocol in detail	5	L2	CO4
<u>Group 2</u>				
1	Illustrate Digital Modulation Techniques NRZ, NRZI, Manchester Encoding, 4B/5B encoding techniques with neat diagram	10	L3	CO1
2	A bit stream 10011101 is transmitted using the standard CRC method. The generator polynomial is x^3+1 . 1. Calculate the actual bit string transmitted?	5	L3	CO2
3	Illustrate the Dijkstra algorithm in detail	10	L3	CO3
4	Discuss Address Resolution protocol in detail	5	L2	CO4
<u>Group 3</u>				
1	Illustrate the various layers of TCP/IP along with protocols at each layer with a neat diagram.	10	L3	CO1
2	With an example demonstrate how the parity check is performed.	5	L3	CO2
3	Illustrate flood-based routing algorithm in detail	10	L3	CO3
4	Discuss IPV4 and IPV6 protocols in detail	5	L2	CO4