

Department of Artificial Intelligence and Data Science

II Year IV Semester

4AID4-07: Data Communication and Computer Networks

Note: Each assignment of Maximum Marks 10. All question carries equal marks.

ASSIGNMENT-I

Q.1 Define the various Topology in networking.	BLT-1	CO-1
Q.2 Give the brief introduction about: (i) Analog signal (ii) Digital signal (iii) Aperiodic signal	BLT-2	CO-1
Q.3 Sketch OSI architecture and explain it.	BLT-3	CO-1
Q.4 Sketch TCP/IP Model and explain it.	BLT-3	CO-1
Q.5 Define various Topologies.	BLT-1	CO-1

ASSIGNMENT-II

Q1. Explain various types of errors in Data Link Layer.	BLT-1	CO-2
Q2. Explain a) Single parity check b) Two dimensional parity check.	BLT-1	CO-2
Q3. Explain the error correction and detection in data link layer.	BLT-1	CO-2
Q4. Differentiate between Pure ALOHA and Slotted ALOHA .	BLT-3	CO-2
Q5. What is CSMA? Define a) CSMA/CD b) CSMA/CA	BLT-2	CO-2

ASSIGNMENT-III

Q1. Explain Design issues in Network layer.	BLT-2	CO-3
Q2. Differentiate between IPV4 and IPV6.	BLT-3	CO-3
Q3. Compare Unicast and multicast routing algorithm.	BLT-2	CO-3
Q4. Define Broadcast routing algorithm.	BLT-1	CO-3
Q5. How the Quality of Service does affects the user in the ternet working?	BLT-3	CO-3

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ASSIGNMENT-IV

Q.1 Define the elements of Transport protocol.	BLT-1	CO-4
Q. 2 What is Transport Layer and how does it Work?	BLT-2	CO-4
Q. 3 Explain the Token Bucket algorithm.	BLT-2	CO-4
Q. 4 Explain the Leaky Bucket algorithm.	BLT-2	CO-4
Q. 5 Define the various types of transmission control protocol.	BLT-1	CO-4

ASSIGNMENT-V

Q.1 What is FTP? Define Ftp protocols.	BLT-1	CO-5
Q. 2 What is Electronic Mail? How many types of protocol used in Electronic mail?	BLT-1	CO-5
Q. 3 What is WWW? Explain its working method.	BLT-2	CO-5
Q. 4 Sketch the diagram of DNS? Define types of DNS and also define zones in DNS	BLT-3	CO-5
Q. 5 What is SMTP Explain?	BLT-6	CO-5

*BLT: BLT shows the **Bloom's taxonomy** levels