

**ANURAG Engineering College**  
(An Autonomous Institution)  
**III B.Tech I Semester Regular Examinations, December – 2024**  
**COMPUTER NETWORKS**  
(COMMON TO CSE AND AI&ML)

Time: 3 Hours

Max. Marks: 60

**Section – A (Short Answer type questions)****(10 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. What is a network? And what are the benefits of the networks?	CO1	L1	1M
2. What is Error? Explain types of error.	CO1	L1	1M
3. In a simplex protocol, in which direction does the data flow?	CO2	L2	1M
4. In a Go-Back-N protocol, if a frame is lost, how many frames need to be retransmitted?	CO2	L2	1M
5. What is the primary challenge in designing a reliable network?	CO3	L1	1M
6. Why was IPv6 introduced?	CO3	L1	1M
7. What is the primary function of the Transport layer in the OSI model?	CO4	L1	1M
8. Is UDP a reliable or unreliable protocol?	CO4	L2	1M
9. What is the primary function of the Domain Name System (DNS)?	CO5	L1	1M
10. What is the technology that allows continuous playback of audio and video content over a network?	CO5	L1	1M

**Section B (Essay Questions)****Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Explain the ISO-OSI model of computer network with a neat diagram.	CO1	L2	10M
<b>OR</b>			
B) Discuss various types of networks topologies in computer network.	CO1	L3	10M
12. A) Explain about the Elementary data link protocols?	CO2	L2	10M
<b>OR</b>			
B) Describe sliding window protocol using Go back n.	CO2	L3	10M
13. A) Explain about the Distance Vector Routing Algorithm.	CO3	L2	10M
<b>OR</b>			
B) Draw the sketch of IPv4 packet header and explain?	CO3	L3	10M
14. A) Enumerate the mechanism of three-way handshake protocol for TCP.	CO4	L2	10M
<b>OR</b>			
B) Write short notes on User Datagram Protocol (UDP).	CO4	L2	10M
15. A) Discuss in detail about world wide web.	CO5	L3	10M
<b>OR</b>			
B) Explain briefly simple network management protocol.	CO5	L2	10M

