

QP Code: D143679		Total Pages: 1	Name:
		Register No.	
FOURTH SEMESTER (CUFYUGP) DEGREE EXAMINATION, APRIL 2026			
COMPUTER SCIENCE			
<b>CSC4CJ205 - COMPUTER NETWORKS</b>			
2024 Admission onwards			
Maximum Time: 2 Hours		Maximum Marks: 70	
<b>Section A</b>			
<b>All Questions can be answered. Each Question carries 3 marks (Ceiling: 24 Marks)</b>			
1	Define computer network. Explain any two types of computer networks.		
2	What is network topology? Explain bus topology and star topology.		
3	Write the functions of the Physical Layer in the OSI model.		
4	Distinguish between analog signals and digital signals.		
5	Define multiplexing. Explain Frequency Division Multiplexing.		
6	What are single bit errors and burst errors?		
7	What is Cyclic Redundancy Check?		
8	Write short notes on Ethernet.		
9	What is IPv4 addressing?		
10	What is Network Address Translation?		
<b>Section B</b>			
<b>All Questions can be answered. Each Question carries 6 marks (Ceiling: 36 Marks)</b>			
11	Explain the layered architecture approach in network design.		
12	Describe the OSI Reference Model with a neat diagram.		
13	Explain guided and unguided transmission media with examples.		
14	Discuss different error detection techniques used in the Data Link Layer.		
15	Explain the working of Stop and Wait ARQ protocol.		
16	Describe the structure and functions of IPv6 addressing.		
17	Explain the Distance Vector Routing Algorithm.		
18	Explain the working of TCP and UDP with their differences.		
<b>Section C</b>			
<b>Answer any ONE. Each Question carries 10 marks (1x10=10 Marks)</b>			
19	Explain the TCP/IP model and compare it with the OSI reference model.		
20	Discuss the working of Dijkstra's shortest path algorithm in link state routing with an example.		