

GLS UNIVERSITY
FCAIT
BCA Sem – IV
SUBJECT: 0301404 - Data Communication and
Networking

Theory Assignment – III

Q-1	Multiple Choice Questions
1.	In_____topology every node is connected to some hub and few nodes are directly connected to the central hub. A. Mesh B. Tree C. Ring D. Bus
2.	Which of the following cable or wires uses electrical current to carry signal? A. Twisted Pair Cable B. Coaxial Cables C. Optical Fibres D. None of them
3.	Communication between a computer and a keyboard involves _____ transmission. A. Simplex B. Half-Duplex C. Full-Duplex D. None of them
4.	_____controls various cell offices and coordinates the communication. A. MTSO B. TCO C. Telephone Exchange D. AMPS
5.	The inner core of an optical fiber is_____in composition. A. glass or plastic B. copper C. metal D. liquid
6.	In fiber optics, the signal is_____waves. A. light B. radio C. infrared D. very low frequency
Q-2	Fill in the blanks:
1.	Coaxial cable is also known as_____.
2.	_____defines how various computers or nodes are connected to one another.
3.	_____wireless band is for terrestrial and satellite microwave and radar

	communication.
4.	Mesh Topology is also called _____
5.	_____ topology can be considered as an extension to BUS topology.
6.	In case of _____, a direct physical connection path is established between two computers.
7.	In the _____ approach, each packet is considered as a totally independent packet from all other.
8.	Message switching is also called _____ technique.
Q-3	True or False
1.	A satellite is a type of wired communications media.
2.	Coaxial wire uses a very thin glass or plastic fiber through which pulses of light travel.
3.	A packet does not contain any other information than the data.
4.	Light emitting diode and injection laser diode are same types of light sources.
5.	In microwave communication, repeaters are used along with antennas to enhance the signal.
Q-4	Answer the following questions:
1.	Discuss merits and demerits of ring and bus topology.
2.	Explain hybrid topology in detail.
3.	Explain the working of cellular/mobile telephones.
4.	Explain guided media in detail with its types.
5.	What are wired and wireless transmission systems? Explain the mechanisms of propagation of radio communication.
6.	What is the difference between message switching and packet switching?
7.	Explain unguided media in detail with its types.
8.	What are the advantages and disadvantages of packet switching over circuit switching?
9.	Explain circuit switching in detail with block diagram.
10.	What is shielded twisted pair wire and unshielded twisted pair wire.
11.	Discuss how tree topology works with diagram.
12.	Write short note on coaxial cable.
13.	What is message switching? Explain how it works.
14.	Discuss how satellite communication differs from microwave communication.
15.	Explain different types of topologies in detail.

Note: All the students have to attempt Q-1, Q-2, Q-3 compulsory. Attempt Q-4 in following sequence:

Roll No.	Question No.
1 to 10, 61 to 70, 121 to 130	1,7,13,14,15,6,12
11 to 20, 71 to 80, 131 to 140	2,8,13,14,15,5,11
21 to 30, 81 to 90, 141 to 150	3,9,13,14,15,4,10
31 to 40, 91 to 100, 151 to 160	4,10,13,14,15,3,9
41 to 50, 101 to 110, 161 to 170	5,11,13,14,15,2,8
51 to 60, 111 to 120, 171 onwards	6,12,13,14,15,1,7,16