GLS UNIVERSITY
FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY
SUBJECT: 1601101 Introduction to Information Technology
Integrated MSc(IT) Sem – I
Theory Assignment – III

Q-1	**Fill in the Blanks**
1	_____ is a process of transferring a message from a sender to a receiver.
2	_____ is 8 bit alphanumeric code that was developed by IBM.
3	The maximum amount of data that a communication system can transfer in a given time is known as _____.
4	FDM stands for _____
5	UTP stands for _____.
6	In _____ switching, the whole message is treated as a data unit and is transferred entirely.
7	_____ refers to the manner in which the nodes of the network are connected together.
8	BCD stands for _____.
9	In early days people used to do counting with things like stones, fingers, sticks, pebble etc. This refers to _____ Number System.
10	In _____ topology every device is connected to a single cable.
11	The Decimal Number System consists of _____ digits.
12	_____ cable use bunches of thin copper wires.
13	_____ device is used for performing modulation and demodulation.
14	ASCII Stands for _____
15	_____ cables are less expensive and easy to install and use.
16	_____ device increases the power of a signal.
17	In _____ switching technique a dedicated physical path is established between the sender and the receiver.
18	_____ Number System contains finite number of symbols/digits.b
19	_____ cables are used for long distance telephone lines for both voice and data transmission.
20	PSTN stands for _____
21	EBCDIC stands for _____
22	In _____ Switching, the sender divides the message into fixed size packets.
23	_____ cable has hair-thin threads of glass or plastic that can transmit light signals.
24	_____ Number System is called Base – 8 number system.
25	Network Card is also known as _____.
26	TDM stands for _____.
27	_____ communication systems use very high frequency radio signals to transmit data through space.

28	NIC stands for _____.
29	In _____ Number System 16 digits are available to represent the values in the system.
30	Repeaters are also known as _____.
31	The method of dividing a physical communication channel into multiple logical channels is known as _____.
32	The bandwidth of a communication system is measured in _____.
Q-2	**True or False**
1	In Circuit Switching the whole message is treated as a data unit.
2	Copper cables transmit electrical signals.
3	There should be at least three satellites in geosynchronous orbit.
4	Unicode uses 8 bit to represent a symbol in the data.
5	Wired communication medium use physical wires
6	In Satellite Communication signals travel in a straight line and cannot bend to pass over obstacles like tall buildings.
7	Hexadecimal Numbers System contains only two digits i.e. 0 and 1.
8	TDM is used for transmission of digital data.
9	In Ring Topology exactly there are two neighbours for each device.
10	In Completely Connected Network n(n-1)/2 communication links needed.
11	A repeater regenerates the signals.
12	In Packet Switching the destination address, the message number, the sequence number of the current packet, the total number of packets is added to the packet.
13	FDM is used for transmitting only analog signals.
14	Unicode uses 32 bit to represent a symbol in the data.
15	There are three commonly used switching techniques.
Q - 3	**Answer the following questions:**
1	Write a short note on Communication System.
2	Explain the concept of Copper Wires. Discuss its types.
3	Differentiate Wired and Wireless Communication System.
4	Write a short on Satellite Communication System.
5	Write a short note on Bus Topology
6	Write a short note on Coaxial Cable.
7	What is Network Switch? Exlpain types of switching techniques in detail.
8	Differentiate Microwave Communication System v/s Satellite Communication System.
9	What is Fibre Optic Cable? Explain its advantages over copper wires.
10	What is the role of Amplifier in IT network.
11	Write a short note on Router and repeater
12	What is topology? Explain all topologies.

13	What is Wireless Communication System? Explain its types.
14	What is Network Card? Explain.
15	Explain the concept of Modem in detail.
16	Write a short note on Microwave Communication System.
17	What is Multiplexer? Explain the methods of multiplexing.
Q - 4	**Conversions**
1	(10101) 2 = ( ) 10
2	(10111) 2 = ( ) 10
3	(100011) 2 = ()10
4	(27) 8 = ()10
5	(4307) 8 = ( )10
6	(BC12) 16 = ( )10
7	(29) 10 = ( )2
8	(2861) 10 = ( )16
9	(34) 10 = ( )2
10	(0.625) 10 = ( )2
11	(01000011) 2 = ( )10
12	(25CB) 16 = ( )10
13	(11010011) 2 = ( )10
14	(34F2) 16 = ( )10
15	(FFFF) 16 = ( )10
16	(234.56) 8 = ( )10
17	(5A7.2C) 16 = ( )10
18	(101010.1111) 2 = ( ) 10
19	(111101.01101) 2 = ( ) 8
20	(1101111011) 2 = ( )8
21	(10111010001100.001000111111) 2 = ( )16
22	(A1C45) 16 = ( )2
23	(D14A) 16 = ( )2
24	(3374) 8 = ( ) 2
25	(BA5) 16 = ( ) 8
26	(722) 10 = ( ) 2
27	(24.361) 10 = ( ) 2
28	(13.6875) 10 = ( ) 2
29	(952.321) 10 = ( )2

30	(428.124) 10 = ( )16
31	(10110101) 2 = ( )10
32	(372) 8 = ( )10
33	(33) 10 = ( )2
34	(1972) 10 = ( )8
35	(227) 8 = ( )10
36	(428.1246) 10 = ( )2
37	(EF.B2) 16 = ( )10
38	(2AF) 16 = ( )10
39	(101.1101) 2 = ( ) 10
40	(BCC.10) 16 = ( ) 10
41	(56.2713) 8 = ( ) 10
42	(345AC) 16 = ( ) 8