GLS UNIVERSITY
FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY
SUBJECT: DATA COMMUNICATION & NETWORKING
BCA Sem – IV
Theory Assignment

Q-1 Fill in the Blanks:

1. The _____layer is concerned with sending raw bits between the source and destination nodes.
2. The group of bits is called ___ or ___.
3. The _____ layer is resposible for transmitting a group of bits between the nodes.
4. The _____ layer is responsible for routing and forwarding of a packet from the source to destination.
5. A Packet contains _____ and ____ address.
6. _____ layer is responsible for Host to Host Delivery.
7. _____layer establish, maintain and synchronize the interaction between two communicating hosts.
8. _____ layer is responsible for encryption and compression.
9. _____ is the topmost layer in OSI Model.
10. ____is smallest network which is very personal to a user.
11. In FDDI, NIC uses second ring as a backup which is called _____.
12. ____ is a radio frequency specification for short range.
13. ____ standard handles the architecture, security, management and internetworking of local area networks (LAN)
14. IEEE 802.3a gave the standard for thin coax__
15 _____ is an IEEE standard which defines Wireless Local Area Network.
16 IP address is divided in ____ differernt categories

Q-2 Write Full Forms:

1. FTP
2. TCP/IP
3. SMTP
4. UDP
5. HTTP
6. IMAP
7. OSI

8. PAN
9. MAC
10. CSMA/CD
11. FDDI
12. CDDI
13. ISDN
14. VLAN
15 IEEE

Q-3 True or False

1. Congestion control is done at Data Link Layer.
2. LAN uses star, bus or ring topology.
3. Token Ring is based on Bus Topology.
4. FDDI uses Twisted Pair Transmission Media.
5. Session layer generates subsessions.
6. UDP offers reliability and acknowledgement.
7. 802.16 is an IEEE standard which defines Wireless Inter-operability for Microwave Access (WiMAX) technology products.
8 IEEE 802.3i for Ethernet over Fiber (10BASE-F) that uses fiber optic cables as medium of transmission.

Q-4 Answer the following questions:

1. Write a note on TCP/IP.
2. Explain OSI Model with Diagram.
3. What is OSI Model? Explain Physical Layer, Data Link Layer and Network Layer in Detail.
4. What is OSI Model? Explain Transport Layer, Session Layer, Presentation and Application Layer in Detail.
5. Write a note on Token Ring.
6. Write a note on FDDI and Explain FDDI Properties, Operation and Self Healing Mechanism.
7. Write a note on Ethernet.
8. Explain LAN, MAN,WAN in detail.
9. Write a note on CSMA/CD.
10 Write a note on ISDN.
11. Write a note on Wireless Networks.
12. Write a note on Internetworking Devices.
13. What is IP address in network? Explain with different classes.

14. Write a note on IEEE 802 standards
15. Difference between IPV4 and IPV6
16. Write a note on DNS

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

Roll No.	Question No.
A001 to A020, B001 to B020, C001 to C020	1,5,9,13
A021 to A040, B021 to B040, C021 to C040	2,6,10,14
A041 to A060, B041 to B060, C041 to C060	3,7,11,15
A061 onwards, B061 onwards, C061 onwards	4,8,12,16