UKA TARSADIA UNIVERSITY (DIWALIBA POLYTECHNIC)
DIPLOMA IN CO/IT ENGINEERING
ASSIGNMENT (COMPUTER NETWORK)

UNIT1

[2MARKS]

1. What is computer network? List out the uses of computer network.
2. List out different application of computer network.
3. Full forms : LAN,MAN,WAN
4. Explain LAN
5. Explain MAN
6. Explain WAN
7. Differentiate : OSI model vs. TCP/IP model
8. Define : guided media, unguided media

[5MARKS]

1. Draw and explain OSI model in detail.
2. Draw and explain TCP/IP model in detail.
3. What is topology? List and explain different topologies with its figure.
4. Explain twisted pair cable in detail.
5. Explain Co-axial cable in detail.
6. Explain fiber optic cable in detail.
7. What is unguided media? List out different unguided media and explain radio waves in detail.

UNIT-2

1. List and explain functions and roles of data link layer.
2. Explain design issues and its method in data link layer.
3. Explain Error control, flow control in detail.
4. List out different elementary data link protocols and explain each and every protocol in detail.

UNIT-3

1. Explain MAC in detail.
2. Explain ALOHA in detail.
3. List and explain CSMA protocols in detail.
4. Write a short note: CSMA/CD
5. Write a short note: CSMA/CA
6. Explain Bit map protocol in detail.

7. Explain binary countdown in detail
8. Explain adaptive tree control protocol in detail.

UNIT-4

1. Explain Responsibilities of network layer.
2. Explain IP address & Prefixes.
3. Explain services provided by network layer to transport layer.
4. What is Routing? Explain static Routing in detail.
5. Draw and explain the environment of network layer protocol.
6. Explain supernet.
7. Explain Store and forward packet switching.
8. Explain connectionless service in detail.
9. Explain structure of IP frame header.
10. Explain advantages & Disadvantages of network layer.

UNIT-5

1. Explain Roles of transport layer,
2. Explain Services provided to the upper layers
3. Explain UDP in detail.
4. Explain TCP in detail.
5. Performance Issues in Transport Layer.

UNIT-6

1. Explain DNS in detail.
2. Explain E-mail in detail.
3. Explain MIME protocol in detail.
4. Explain SMTP protocol in detail.
5. Explain HTTP protocol in detail.