Course: Introduction to Computer Network (23CSCN01I)



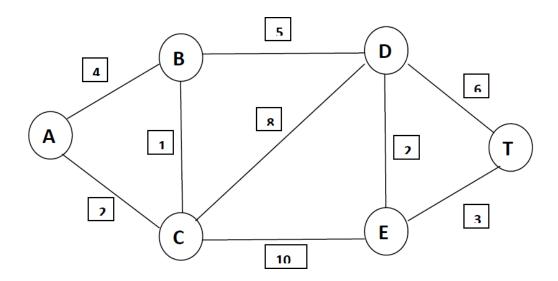
# **Assignment 5**

## **Covered Topics:-**

Dijkstra's Algorithm and Encoding Schemas

### **Problem 1**

Create the routing table of the router 'A' in the following network and determine the cost if the destination is the router T. (Dijkstra's Algorithm)



# **Problem 2**

Create the routing table using the data in the previous question (Destination, Next hop, Cost).

Module Leader: Prof.Dr. Ahmad Mostafa

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### Problem 3

Find the interface each IP address should go through.

Prefix Match	Link Interface
10.50.20.0 /24	0
10.50.20.0 /22	1
10.50.0.0 /16	2
10.0.0.0 /8	3
Otherwise	4

- a) 10.50.20.10
- b) 10.50.20.16
- c) 10.0.0.50
- d) 24.0.0.1

### **Problem 4**

Draw for the follow bits their corresponding graph for the following coding schemes: (01001101)

- a) UniPolar.
- b) Polar (NRZ-L, NRZ-I, RZ).
- c) Bipolar AMI.

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