

UIT2403 – Data Communication and Networking

UNIT I: INTRODUCTION TO NETWORKS

Tutorial – II

Network Topology

Bus, Ring, Star and Mesh Topologies

Part-II

Date: 05.03.2024

1. For n devices in a network, what is the number of cable links required for a mesh, ring, bus, and star topology?
2. For each of the following four networks, discuss the consequences if a connection fails.
 - a) Five devices arranged in a mesh topology
 - b) Five devices arranged in a star topology (not counting the hub)
 - c) Five devices arranged in a bus topology
 - d) Five devices arranged in a ring topology
3. In the ring topology in Figure 1, what happens if one of the stations is unplugged?

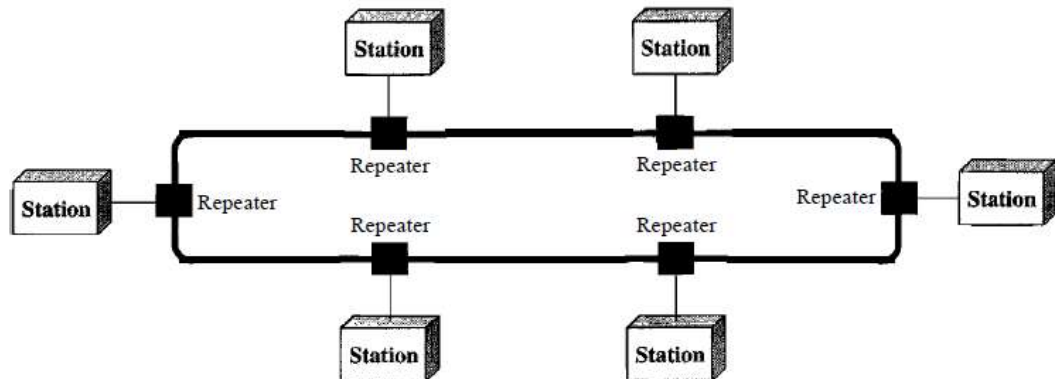


Figure 1

4. In the bus topology in Figure 2, what happens if one of the stations is unplugged?

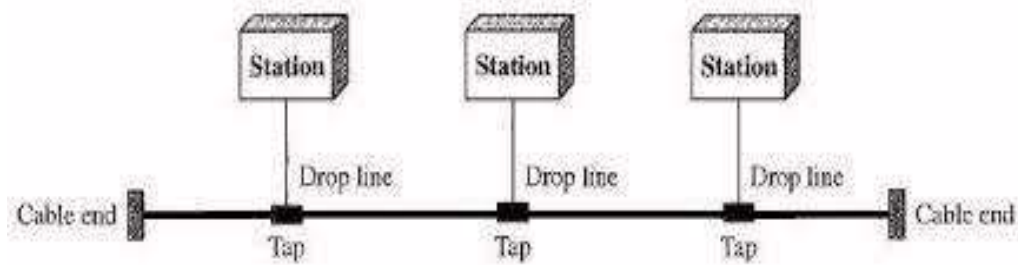


Figure 2

5. Draw a hybrid topology with a star backbone and three ring networks.
6. Draw a hybrid topology with a ring backbone and two bus networks.
