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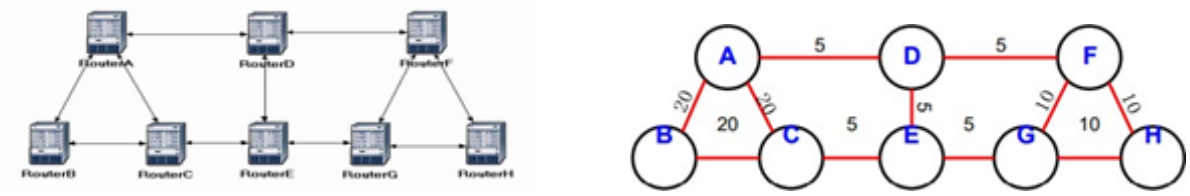
Class: B.Tech(III) CSE
Subject Code: CSN-361

# Assignment L6

1. **Use OPNET to implement OSPF (Open Shortest Path First) protocol. Create a scenario – Scenario1, of 8 routers of any type (e.g., slip8_gtwy) and configure the Network topology and the Link costs as shown in Fig. 1(a) and Fig. 1(b) respectively.**




**(a) Network Topology** **(b) Link Costs**

**Fig. 1 Configuration of the network *Scenario1***

**Create a duplicate scenario – *Scenario2*, where the routers in *Scenario1* are partitioned into 3 different areas as follows (Fig 2):**

**Area1: RouterA, RouterB, RouterC**
**Area2: RouterD, RouterE**
**Area3: RouterF, RouterG, RouterH**

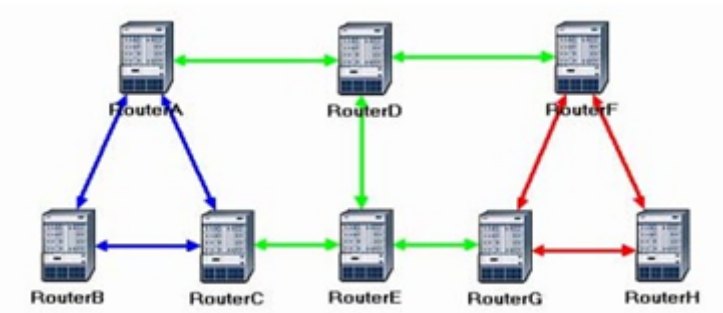
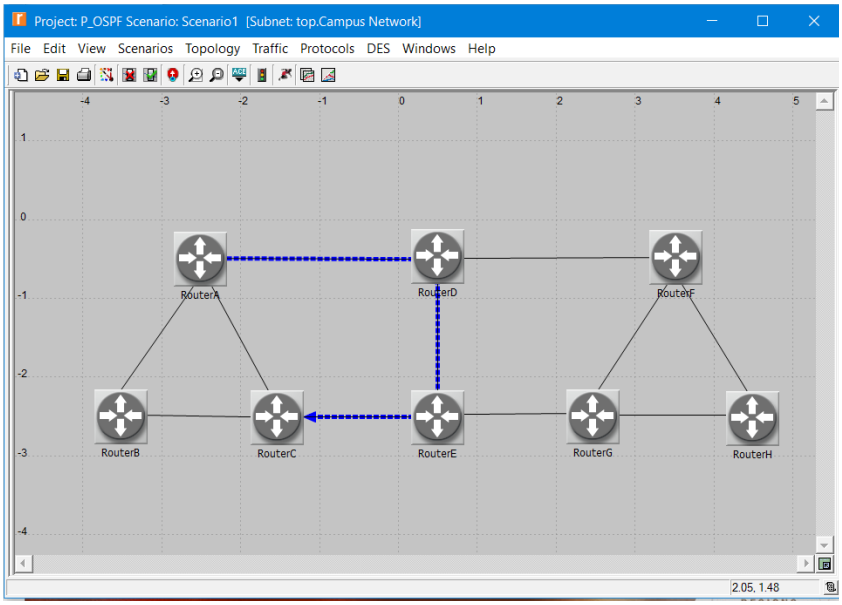


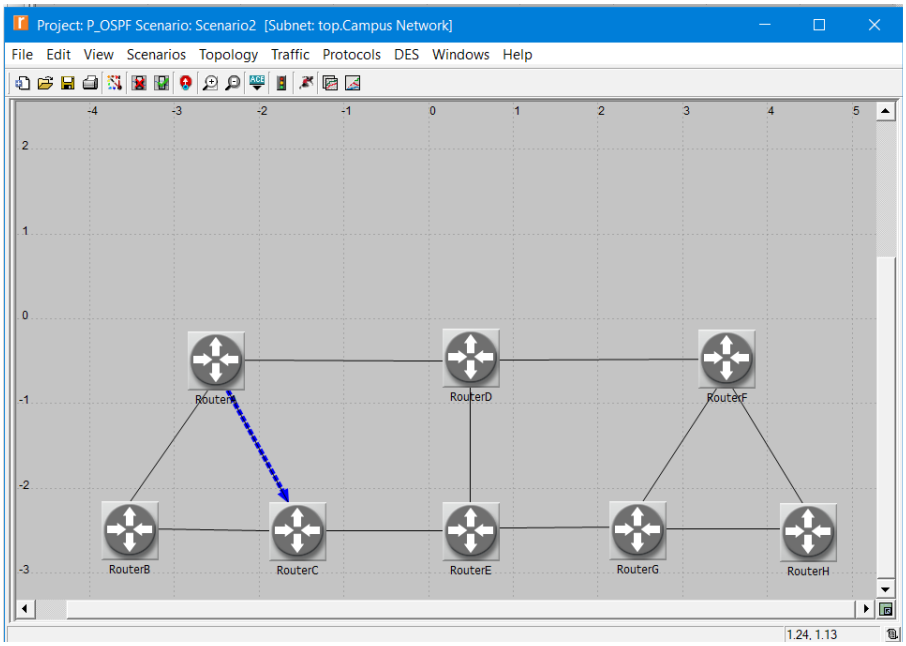

**Fig. 2 Configuration of the network for Scenario2**

**Display the route for the traffic demand between RouterA and RouterC in *Scenario1.***
**Display the route for the traffic demand between RouterA and RouterC in *Scenario2.***

## Solution:




Scenario1(No Areas)




Scenario2(Areas)

2. **Use OPNET to implement RIP (Routing Information) protocol on the same network configurations as given in Problem 1.**

   **Display the route for the traffic demand between RouterA and RouterC in *Scenario1.***

   **Display the route for the traffic demand between RouterA and RouterC in *Scenario2***

   **Solution:**