

**COMP9332 Network Routing and Switching
Solution of Self-assessed Tutorial for Multicast**

Solve the following questions from Chapter 10 Forouzan (3rd Ed., pages 252-254):

3, 19, 20, 21, 26, 27.

A3. 01:00:5E:18:3C:09

A19. Router will send a membership report out of all interfaces except the one from which it received the report from the host. The membership report will contain the following information:

Type = 16

Maximum response time = 0

Group address = 232.54.10.34

A20. Router does not take any action.

A21. 225.32.56.8 will be added. 225.11.6.8, 226.23.22.67, and 229.12.4.89 will be deleted.

A26. 2^{23}

A27. 2^{28}

Solve the following questions from Chapter 15 of Forouzan (3rd Ed. page 455):

4, 5, 6, and 7.

A4. First, “Network B” should read “Router B” and “13.23.0.0/16” should read “134.23.0.0/16” in this question. The answer is Router B.

A5. No. RPF is basically a flooding process. With RPF, routers do not ‘mark’ any interfaces for any specific source/group (ie does not create any entry for the multicast routing table).

A6. Yes. All networks become leaves of this ‘giant’ tree. Note that the tree is a *broadcast* tree as all networks get a copy of the multicast packet.

A7. Yes. This time the tree is a multicast tree. Only the networks where a host/router is a member of the multicast group become the leaves of this tree.