CHAPTER 15

Multicasting and Multicast Routing Protocols

Exercises

1. See Tables below:

R2 Table	
Dest.	Next-hop
N1	---
N2	---
N3	---
N4	R3
N5	R1
N6	R1

R3 Table	
Dest.	Next-hop
N1	R2
N2	R2
N3	---
N4	---
N5	R2
N6	R2

R4 Table	
Dest.	Next-hop
N1	R1
N2	R1
N3	R1
N4	R1
N5	---
N6	---

3. See the entry in the table below:

Destination	Interface
---	---
10.0.0.0	2
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5. No, RPF does not create a shortest path tree because a network can receive more than one copy of the same multicast packet. RPF creates a graph instead of a tree.

7. Yes, RPM creates a shortest path tree because it is actually RPB (see previous answer) with pruning and grafting features. The leaves of the tree are the networks.