

**COMP9332 Network Routing and Switching**  
**Self-assessed Tutorial for OSPF**

**In this tutorial, you'll solve some of the questions from Forouzan (3<sup>rd</sup> Ed. Forouzan, pages 433-434).**

**Q17.** Using the Figure of Slide 58-59, show the link state update/router link advertisement for router A.

**Q18** Using the Figure of Slide 58-59, show the link state update/router link advertisement for router D.

**Q19.** Using the Figure of Slide 58-59, show the link state update/router link advertisement for router E.

**Q20.** Using the Figure of Slide 58-59, show the link state update/network link advertisement for N2.

**Q21.** Using the Figure of Slide 58-59, show the link state update/network link advertisement for N4.

**Q22.** Using the Figure of Slide 58-59, show the link state update/network link advertisement for N5.

**Q23.** In the Figure of Slide 58-59 assume that the designated router for N1 is router A. Show the link state update/network link advertisement for this network.

**Q24.** In the Figure of Slide 58-59 assume that the designated router for N3 is router D. Show the link state update/network link advertisement for this network.

**Q29.** Show the autonomous system with the following specifications:

- (a) There are 8 networks (N1-N8)
- (b) There are 8 routers (R1-R8)
- (c) N1-N6 are Ethernet LANs
- (d) N7-N8 are point-to-point WANs
- (e) R1 connects N1 and N2
- (f) R2 connects N1 and N7
- (g) R3 connects N2 and N8
- (h) R4 connects N7 and N6
- (i) R5 connects N6 and N3
- (j) R6 connects N6 and N4
- (k) R7 connects N6 and N5
- (l) R8 connects N8 and N5

**Q30.** Draw the graphical representation of the autonomous system of Q29 as seen by OSPF.