3. Yes, this is true. Each hop has a predetermined out path, so no need to route an arbitrary path.

6. Yes, if there is a problem in a line (noise, etc.) the signal could be misdelivered.

7. 24 hops along the following route: ABEF, ABCF, ABEG, ABCD, AGEB, AGHD, AGHF, AGEF.

10. 50 routers = 50 delay vectors \* 8 bits per vector = 400 bits/exchange \* 2 exchange/sec = 800 bps.

Problem 5:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| To | A | C | F | E | Thru |
| A | 0 | 6 | 10 | 3 | A |
| B | 3 | 3 | 7 | 5 | C |
| C | 7 | 0 | 8 | 2 | C |
| D | 3 | 5 | 6 | 6 | D |
| E | 4 | 3 | 7 | 0 | E |
| F | 12 | 8 | 0 | 7 | F |
| Delay | 3 | 2 | 7 | -- | -- |