**Homework Chapter 3**

Review Questions:

1. C
2. A, C
3. A, B
4. D
5. B
6. B, C, D
7. C
8. B, D
9. A, C, D
10. A, C
11. C
12. C
13. A
14. B, C, D
15. B
16. B, C
17. B
18. A, B
19. D
20. A, D
21. C
22. B
23. C
24. D
25. B, D

Case Projects:

3-1: For the shared-bandwidth problem a good solution is to replace the hub with switches but since running cables is a problem I would recommend creating a wireless LAN and this will requires the following changes:

Purchasing a Wireless Access Point

Purchasing Wireless NICs

The topology that would be used is the required for Wireless LAN which is a physical Star topology and logical Bus topology

3-2:

The type of topology should be an extended Star

The network would be a combination of both.

All computers would be attached to the network

A switch is the easiest to reconfigured

A full duplex mode offers the best access to the network medium’s bandwidth between a pair of devices.

3-3:

The network would again be a combination of both

There would be to LANs connected with Point to Point topology to connect the two locations creating a WAN where all computers will be connected to.

For the offices works best Physical Star and logical switched topology and for the floor which would use wireless is best a physical star and logical bus topology.