CCNA3 Exploration Chapter 1. Study questions.

1.1

What are the three layers of the hierarchical network design model?
What are the advantages of designing LANs using the hierarchical model?
What is the purpose of the access layer?
What sort of devices are found at the access layer?
¿Qué tipo de dispositivos se encuentran en la capa de acceso?
What is the purpose of the distribution layer?
What sort of devices are found at the distribution layer?
What is the purpose of the core layer?
What is a collapsed core model and where might it be used?
¿Qué es un modelo de núcleo colapsado y donde podría ser utilizado?
What is a wiring closet?
¿Qué es un armario de cableado?
Why is it not easy to see the logical hierarchical design of a network when looking at the network layout in a building?
Por qué no es fácil de ver el diseño lógico de una red jerárquica cuando se mira en el diseño de la red en un edificio?
Why is redundancy important in a network?
Which layers normally have redundancy built in?
How can the hierarchical design help to give high performance?
How can switches at the different layers contribute to network security?
How does a hierarchical design help to make a network manageable?
Should the same type of switch be used at each layer of the hierarchical design?
What is "network diameter" in hierarchical network design?
What is network device latency?
What sort of processing does a switch have to do on each packet?
How can bandwidth aggregation be implemented?
Why is redundancy not normally provided at the access layer?
When designing a new network, at which layer would you start?
What is a converged network?
What factors have slowed the move towards converged networks?
What are the benefits of a converged network?
Why was videoconferencing equipment originally kept on a separate network from data or phones, and what made it possible to combine videoconferencing with other networks?

1.2

What is traffic flow analysis, and why might you want to do it?
How can measurements be made in order to carry out a traffic flow analysis?
How can a User Communities Analysis help with network design?
Which two types of traffic need to be considered when planning data storage facilities?
How can server-server traffic be optimised?
How might you deal with a bottleneck where there is insufficient bandwidth?
Why is it important to produce a topology diagram as part of the network design process?

How is the thickness of a switch (top to bottom) measured?

What is the difference between a fixed configuration switch and a modular switch?

What are stackable switches?

What is the port density of a switch?

If 80 outlets need to be connected to a switch, why is a single large modular switch likely to be a better choice than four fixed configuration switches with 24 ports each?

What is wire speed, and what is forwarding rate?

What is Etherchannel?

What is PoE and what are its advantage and disadvantage?

At which OSI layer to typical traditional switches operate?

What is a multilayer switch?

What features are required for access layer switches?

What features are required for distribution layer switches?

What features are required for core layer switches?

Which Cisco Catalyst switch does not provide a command line interface?

Which Catalyst switch is suitable for access level use in small organisations, provides up to 48 ports, but does not provide PoE?

What does the Catalyst 3560E switch provide that the 3560 switch does not?

Which catalyst switch has forwarding rates up to 720 Gbps?

Which type of catalyst switch can be stacked so that up to 9 switches can operate as a single logical switch?

What is special about the Catalyst 4900 series switches?