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1. Name 3 design principles and state what they mean. (3)

Answer:

- a. Complete mediation: Check every access to an object to ensure that access is allowed.
- b. Least privilege: A subject should be given only those privileges necessary to complete its task
- c. Economy of mechanism: Keep the design and implementation as simple as possible

2. Differentiate between IPSec *transport* and *tunnel* modes (2)

Answer:

In *transport mode*, only IP packet data area is encapsulated. The IP Header is not protected. However, in *tunnel mode*, the entire IP packet is encapsulated in an IPSec envelope

3. State what you understand by the following (3)

Answer:

*Firewall*: It is a configuration of machines and software that limits network access

*Virtual Private Network*: It is a private network that is configured within a public network

4. Illustrate the stages of a waterfall model. (2)

Answer:

