Q: What is the CIA triad?  
A: The CIA triad is Confidentiality, Integrity and Availability. It’s a common model to form the basis of a security system

Q: What is the difference between data integrity and system integrity?

A: Data integrity ensures that data and information can only be changed using a authorized manner and maintaining the consistency of it’s entire life cycle. System integrity ensures that the system behaves according to its parameters and limits, and it remains operational.

Q: What is the difference between active and passive attacks?

A: Active attack is when a hacker exploits the network to attempt to change or remove the data on the victim’s computer, usually resulting in encryption or deletion of important data. A passive attack is when the hacker gain access to the system and steals data without altering the system.

Q: What is a security policy? What are the actions taken when implementing a security policy?

A: A security policy is the definition of what it means to be secure for a system. When implementing a security policy, you need to assess which important assets to protect, how to protect them, backup procedures, how to deal with an attack, recovery procedure, helping employee with security courses and problems.

Q: Assign a low, moderate, critical impact level for the loss of confidentiality, availability and integrity for each scenario:

A1: Org managing public information

* Confidentiality: low because the information is already made public
* Availability: high because if the web server goes down, it will affect the users’ ability to access this information thus damaging the company reputation
* Integrity: moderate because while it is not important data, it can cause panic for the user

A2: Law enforcement managing extremely sensitive investigation info

* Confidentiality: High because this information is extremely confidential, some can be related to high impact cases and can be crucial evidence to solving other cases
* Availability: High because if these data are breached, criminals associated with these cases can use that evidence to hide themselves further
* Integrity: High because the enforcement is dealing with highly sensitive information which are not available to the public, which can cause mass panics and discussion