Security

Security is the method which makes the accessibility of information or system more reliable.
Security means to protect information or system from unauthorized users like attackers who do harm to system or to network intentionally or unintentionally. Security is not only to protect system or network, but also allows unauthorized users to access the system or network.
The ideal approach to security is the ‘onion skin’ approach in which the failure of any security control will not leave an asset completely unprotected.

Security layers:
For protecting any organizations, following multi-layers of securities are important.
Physical Security: It will protect physical items/assets like hard disk, RAM, objects or areas form unauthorized users.
Personal Security: It will protect the individual users or groups in the organization who are authorized to use operations and organization.
Operational Security: It will protect details of particular operations/series of activities in the organization.
Communication Security: It will protect communication technology, media and content of communication.
Network Security: It will protect networking component like routers, bridges, connections and contents etc.
Information Security: It will protect all informational assets. It contains management information security, computer and data security and network security.
Organization should implement tools like policy, training and education to provide security to information and its system.

The Three Pillars of Information Security

Confidentiality

Integrity

Availability

The following three concepts are considered the pillars of Info sec All of the infosec controls and safeguards, and all the threats, vulnerabilities and security processes are subject to this CIA yardstick.
1) Confidentiality: The concept of confidentiality is used as an attempt to prevent the intentional or unintentional unauthorized disclosure of message contents.
   Loss of confidentiality can occur in many ways such as through the intentional release of private company information or through a misapplication of network rights.
2) Integrity: The concept of integrity ensures that
   a. Modifications are not made to the data by unauthorized personnel or processes.
   b. Unauthorized modifications are not made to data by authorized personnel.