Enterprise Security Architecture
BS-SE (13)

Name: BABAR KAMAL

ID: 5507

Question 1:
Answer:

a). Virus: A common threat that is not unique to networks. Networks facilitate the spread of viruses, potential for harm is high including loss of data and downtime.

b). Enterprise Security: Enterprise security is the process by which an organization protects their information from infringement of confidentiality, integrity or availability such as: Data, Servers, Storage, Network etc.

c). Security Risk: Any action that compromises the security of information owned by an organization.

d). Caesar Cipher: Caesar cipher is one of the earliest known and simplest chippers, It is the type of substitution cipher, Replaces each letter by 3rd letter on

Example: meet me after the toga party
             PHHW PH DIWHU WKH WRJD SDUWB

Question 2:
Answer: a).

Active Attacks: In active attacks the information modified, may change data or harm the system. Attacks threatening integrity and availability are active attacks, Victim gets informed in active attack.

Passive Attacks: In passive attacks the information remains unchanged, doesn;t modify data or harm the system. Passive attack is dangerous for confidentiality. Victim doesn't get informed in passive attack. E.g: snooping and traffic records.

Answer: b).
Cryptography:
- A word with greek origin means Secret Writing.
- Cryptography is more popular than Steganography.
- Attack's name is Cryptanalysis. (the art and science of decrypting messages).
- Cryptography's only secret message is hidden.
- Cryptology: cryptography + cryptanalysis.

Steganography:
- Steganography is the art and science of hiding information into convert channels so as to conceal the information and prevent the detection of the hidden message.
- Less popular than cryptography.
- Steganography conceals the existence of the message
- Cryptography renders the message unintelligible to outsides by various transformations of the text.

Question 3:

Answer: a). Encipher "meet after the toga party" using Rail fence cipher.

Message out as : m e m a t r h t g p r y e t e f e t e o a a t
Cipher text is read from the above row by row: MEMATRHTGPRYETEFETEOAAT

Answer: b). Encipher "JAMESBONDNEEDSBACKUP" using transposition cipher.

Message: JAMESBONDNEEDSBACKUP
Code: JEONDAUASNESCPMBDEBK

Placing the letters vertically into table:

J	E	O	N	D	A	U
A	S	N	E	S	C	P
M	B	D	E	B	K	