Assignment 1

Security treatd CIA:

The confidentiality, Integrity and

Availability is a guiding model in

information security. A comprehensive

information security streategy includes

policies and security controls that

minimize. threats to these three

crucial components.

thy sical

Pumpsfer INP

Confidentials
Information
Security A

Integrity Availability

togice inishing Buting Vishing

Definition of cyber attack:

A cybercattack occurs when there is an unauthorized action against computer infrastructure that compromises the confidentiality, integristy or availability of it's content

Types of cyber attack:

Cyber allack physical attack Psychological Technical Attack physical Dumpstere MM Destr DD05 SQL injection Driving Software C_{OMPU} Harida Phishing Bating Social Engineering

Symmetrice energyption: 50 + 5000

Symmetric encryption is a type of Crypography where the same key is Of data.

Key points:

- · Single Key is fore both encryption . Harsand adecray ption. about of soll
 - · faster and Less complex than assymmetrice encryption.
 - suitable forz large amount of dato

Main challenge: Securiely sharing
the key between parcties.

example: AES, DES, Blowfish, Two fish! 1929 13/9 13/9 10000

Asymetric encryption:

Asymmetric encryption is a cryptography method that uses two different
keys a public key and private key
for encryption and decryption.

The public key is shared openly.

The private key is kept secret.

e faster and Less complex than

using the receiveres public key

can decrept the cipherctext.

Example: RSA, ECC, DSA

Steganogreaphy

Steganography is the preactice of hiding searcet infortmation within an ordinarry, non-secret file on message to avoid detection.

The goal is to concept the existence of the infortmation,

key point:

- -> Unlike encryption, steganography hides the existence of the message itself.
- -> Commonly used with images, audio files, videos on text.
- -> If done propertly, no one will even know there is a hidden message.

How it works : phase prinspate -> A sectret message is embedded inside other file using special epossem ro simues. -> The file looks normal to a casual prateiro observercinos ot al los ent of the information. Key point: Wilke energytion, stegronography hides the existence of the metsage ilsolf. -> commonly used with images, audit files, videos ore taxt. ere your buckereld me and one know there is a hidden message