Assignment 1

1. Explain CIA triad.

Confidentiality, integrity and availability, also known as the CIA triad, is a model designed to guide policies for information security within organization or network.

* Confidentiality - It is roughly equivalent to privacy.
→ Process of securing information from unauthorized access.

* Integrity - It involves maintaining the accuracy and trustworthiness of data over its entire lifecycle.
→ Securing the information from unauthorized modification.

* Availability - It means information should be consistently and readily accessible for authorized parties.

2. Differentiate b/w ~~Phising~~ Phishing and Spamming with an example.

Spamming	Phishing
→ Spam is basically junk mail / messages flooding in inbox.	→ Phishing is a social engineering attack and it not just limited to emails.
→ ex- You have won lottery worth 20000 ₹	ex- • Requesting personal data.
• Fake virus alerts.	• pretending to be original website.

3. Define Threat and what are its 2 types.
A threat is an illegal activity that can cause damages such as loss of information and data corruption to the network of an organization.

There are two types of threat.
ⓐ Accidental threat
ⓑ Intentional threat.

4. Network attacks are of 2 categories mention them and their types in brief.

Attacks

Passive

Active

Release of
→ message
content.

→ Masquerade

→ Replay

→ Traffic
Analysis

→ Modification of Message

→ Denial of Service.
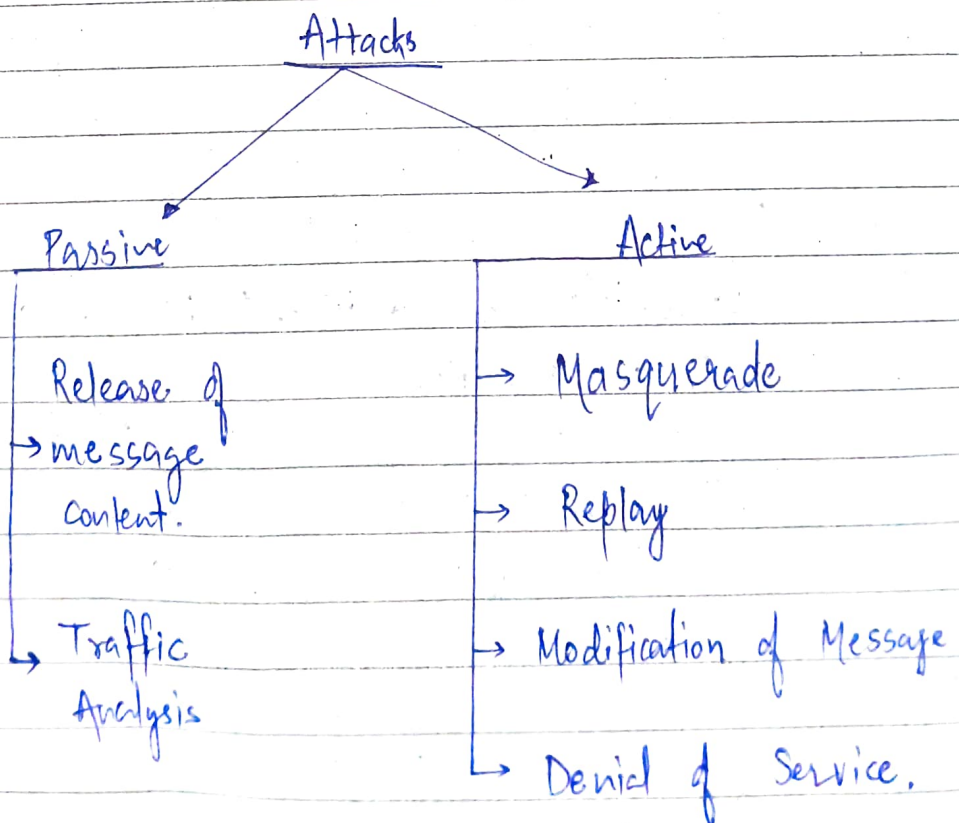
- **Passive Attack :-** The attacker does not intend to cause any harm to the network.

→ Only monitors, analyzes or observes the information available over the network.

- **Active Attack :-**
→ Intentions can be wrong.
→ The attacker tries to steal information from the network.

5. Define passive attacks in network and its types.
→ A passive attack attempts to learn or make use of information from the system but does not affect system resources.
→ The attacker observes the information for which he/she does not have access rights.

Its types are —

ⓐ Release of the message content.

ⓑ Traffic Analysis.