Overview of Incident Management

- ❖ Incident Management: a set of pre-defined processes to identify, analyze, prioritize, and resolve incidents.
- Incident Management includes:
 - Vulnerability Analysis
 - Artifact Analysis
 - Security Awareness Training
 - Intrusion Detection
 - Technology Monitoring
- ❖ Incident Handling and Response: a process of taking organized and careful steps when reacting to a security incident or cyberattack.
- Incident Handling and Response steps:
 - o **Preparation**:
 - Audit of resources and assets to determine the purpose of security and defining the rules, policies, and procedures that drive the IH&R process.
 - Building and training an incident response team, defining incident readiness procedures, and gathering required tools as well as training employees to secure their systems and accounts.
 - o Incident Recording and Assignment:
 - Initial reporting and recording of the incident take place.
 - The identification of an incident, defining incident communication plans for employees.
 - communication methods involving informing IT support personnel or raising an appropriate ticket.

Incident Triage:

 identified security incidents are analyzed, validated, categorized, and prioritized.

o Notification:

 The IH&R team informs various stakeholders, including management, third-party vendors, and clients, about the identified incident.

o Containment:

 involves stopping the spread of infection to other organizational assets and preventing additional damage.

Evidence Gathering and Forensic Analysis:

■ The IH&R team accumulates all possible evidence related to the incident and submits it to the forensic department for investigation.

o Eradication:

■ The IH&R team removes or eliminates the root cause of the incident and closes all the attack vectors to prevent similar incidents in future.

o Recovery:

 The IH&R team restores the affected systems, services, resources, and data through recovery.

Post-Incident Activities:

- the security incident requires additional review and analysis before closing the process. Conducting the final review is an important step in the IH&R process which includes:
 - Incident documentation
 - Incident impact assessment
 - Reviewing and revising policies
 - Closing the investigation
 - Incident disclosure