#### CYBER ENRICH TRAINING PROGRAM | MODULE II

**Mobile Forensics** 

#### **Mobile Forensics**

- Branch of Digital Forensics
- Forensically Sound Data Extraction
- Mobile Forensics Process
  - Seizure
  - Acquisition
  - Analysis/Examination
- Mobile Status (on/off)
- Faraday bag (isolate Cell Phone)





## Challenges in Mobile Forensics

- Hardware Differences
- Mobile Operating Systems
- Mobile Platform Security Features
- Preventing Data Modification
- Anti-Forensics Techniques
- Passcode Recovery
- Lack of Resources





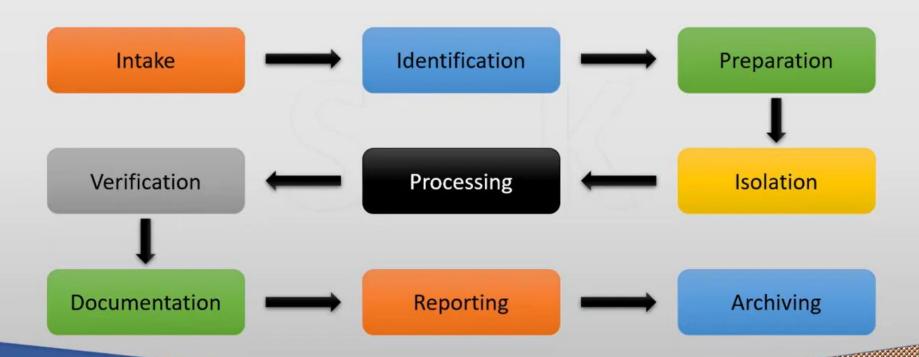
## Challenges in Mobile Forensics

- Dynamic Nature of Evidence
- Accidental Reset
- Device Alteration
- Communication Shielding
- Lack of Availability of Tools
- Malicious Programs
- Legal Issues





#### Mobile Phone Evidence Extraction Process



# **Mobile Forensics Tool Leveling System**

Micro Read

Chip-Off

**Hex Dump** 

Logical Analysis

**Manual Extraction** 

# Data Acquisition Methods

Physical Acquisition

Logical Acquisition

**Manual Acquisition** 

# Potential Evidences on Mobile Phone

**Address Book** 

SMS, MMS, E-mail

**Web Browser History** 

Photos, Videos, Music, Documents

Calendar

Network Communication, Social Media Data

Maps

**Deleted Data**