

# In Class Activity 01

**1. What is cryptography primarily concerned with?**

- A. Storing large data efficiently
- B. Protecting information from unauthorized access
- C. Improving network speed
- D. Designing hardware

**2. Cryptography mainly helps to protect:**

- A. Software performance
- B. Data, communication, and identity
- C. Internet bandwidth
- D. Operating systems

**3. Which statement best describes cryptography?**

- A. It prevents all cyber attacks
- B. It detects malware automatically
- C. It limits the damage when attacks occur
- D. It removes vulnerabilities

**4. Why is cryptography necessary in modern systems?**

- A. Data travels only in private networks
- B. Data is always encrypted automatically
- C. Data travels over untrusted networks
- D. Data cannot be intercepted

**5. Which of the following is NOT an everyday use of cryptography?**

- A. WhatsApp messaging
- B. Online banking
- C. Word document editing
- D. HTTPS websites

**6. CIA triad stands for:**

- A. Confidentiality, Integrity, Authorization
- B. Control, Integrity, Availability

- C. Confidentiality, Integrity, Availability
- D. Control, Identity, Access

**7. Which security goal ensures that only authorized users can read data?**

- A. Integrity
- B. Availability
- C. Confidentiality
- D. Authentication

**8. Unauthorized modification of data is a violation of:**

- A. Confidentiality
- B. Integrity
- C. Availability
- D. Authentication

**9. Banking mobile app downtime mainly affects:**

- A. Integrity
- B. Confidentiality
- C. Availability
- D. Authorization

**10. Which technique helps preserve confidentiality?**

- A. Encryption
- B. Backup
- C. Version control
- D. Logging

**11. Hashing is mainly used to support:**

- A. Availability
- B. Integrity
- C. Authorization
- D. Accounting

**12. Which security function answers the question: “Who are you?”**

- A. Authorization
- B. Accounting
- C. Authentication
- D. Integrity

**13. Which factor represents “Something you have”?**

- A. Password
- B. Fingerprint
- C. Voice
- D. Smart card

**14. Authorization determines:**

- A. Who the user is
- B. What the user can access
- C. How data is encrypted
- D. When logs are created

**15. A user can authenticate successfully but still be denied access because of:**

- A. Accounting
- B. Encryption
- C. Authorization
- D. Integrity

**16. Which AAA component keeps records of user activity?**

- A. Authentication
- B. Authorization
- C. Accounting
- D. Availability

**17. Non-repudiation ensures that:**

- A. Messages cannot be modified
- B. Sender cannot deny sending a message
- C. Systems remain online
- D. Passwords are encrypted

**18. A weakness in a system that can be exploited is called:**

- A. Threat
- B. Risk
- C. Vulnerability
- D. Attack

**19. A potential danger that may exploit a vulnerability is called:**

- A. Threat
- B. Risk
- C. Attack
- D. Asset

**20. Any action that compromises security is known as:**

- A. Risk
- B. Vulnerability
- C. Threat
- D. Attack

**21. Risk can be expressed as:**

- A. Threat + Vulnerability
- B. Likelihood × Impact
- C. Attack – Control
- D. Asset ÷ Threat

**22. Attacks can be categorized mainly into:**

- A. Logical and physical
- B. Internal and external
- C. Passive and active
- D. Hardware and software

**23. Which of the following is a passive attack?**

- A. Modifying a database record
- B. Stealing network traffic silently
- C. Deleting files
- D. Blocking a server

**24. Which action represents an active attack?**

- A. Eavesdropping
- B. Traffic monitoring
- C. Message modification
- D. Packet sniffing

**25. When one entity pretends to be another, it is called:**

- A. Replay
- B. Masquerade

- C. DoS
- D. Modification

**26. Capturing and retransmitting valid data to gain unauthorized access is called:**

- A. Modification
- B. Masquerade
- C. Replay
- D. Interception

**27. Preventing legitimate users from accessing services is known as:**

- A. Replay
- B. Masquerade
- C. Denial of Service
- D. Spoofing

**28. Which of the following best describes a motive of cyber attacks?**

- A. Improving system performance
- B. Data compression
- C. Financial gain
- D. Software testing

**29. WannaCry is an example of:**

- A. Hardware failure
- B. Natural disaster
- C. Cyber attack
- D. System update

**30. Which statement is TRUE about cryptography?**

- A. It replaces secure coding
- B. It guarantees system availability
- C. It supports security objectives
- D. It eliminates all vulnerabilities