

FOUNDATION

- a. Introduction
- b. The CIA Triad
- c. Practice Activity: The CIA Triad
- d. Identity and Access Management I
- e. Identity and Access Management II
- f. Identity Federation
- g. Security Governance: Policies, Standards and Procedures
- h. Security Governance: GDPR, HIPAA, PCI-DSS and Intellectual Property
- i. Cryptography
- j. Hashing and Digital Signatures
- k. Quiz (Foundations)

NETWORK SECURITY

- a. Introduction to OSI and TCP/IP
- b. Application and Transport Layers
- c. Domain Name System (DNS)
- d. The Network Layer
- e. The Link Layer
- f. Security Protocols: SSL/TLS, IPSec, VPNs, SSH
- g. Lab Setup
- h. Lab: Port Scanning
- i. NAT: Network Address Translation
- j. Firewalls
- k. Wireless Networks and Security

ATTACKS

- a. Password Attacks
- b. DoS and DDoS
- c. DNS Attacks
- d. Network Attacks

- e. Man in the Middle
- f. Social Engineering
- g. Phishing Attack and Investigation

WEB APPLICATION SECURITY

- a. Web Application Architecture
- b. SQL Injection
- c. Blind SQL Injection
- d. Mitigating SQL Injection Attacks
- e. XSS: Cross Site Scripting
- f. Vulnerability Management

MALWARES

- a. Malware: Introduction
- b. Viruses and Worms
- c. Trojans
- d. Spyware adware and ransomware
- e. Logic Bombs and Rootkits
- f. Anti-malware

INTERVIEW QUESTIONS AND CONCLUSION