

[3 Hours]

[Total Marks: 80]

**Note: Question No.1 is compulsory**

**Attempt any Three questions from Question No. 2 to 6**

Q1. Attempt any four

[20]

- a) Define ethical hacking. Explain any four types of hackers.
- b) Differentiate White hat & Black hat hackers.
- c) Explain Denial-of-Service (DoS) & Man-in-the-Middle Attacks.
- d) Explain in detail how to prevent from the hackers.
- e) Under Indian IT Act 2008 explain section 3 – “Authentication of Electronic Records by Use of Digital Signature”.

Q2. A) What is Foot printing. Explain Active and Passive Footprinting.

[10]

B) Explain footprinting counter measures & Tools.

[10]

Q3. A) Define scanning. What are the objectives & Explain its types? Write a note on Scanning Live System- Wardialing.

[10]

B) Define intrusion detection system and Describe its evasion techniques- Fragmentation, Flooding, Obfuscation, Encryption.

[10]

Q4. A) Differentiate DOS and DDOS attack. Explain types of DoS and DDoS Attacks.

[10]

B) Explain the Concept of Botnet with its working and types.

[10]

Q5. A) Describe Web Server Attacks Techniques & Stages of Web Server Attacks.

[10]

B) What Is SQL Injection. How to detect SQL Injection Vulnerabilities? How to prevent SQL Injections (Sqli).

[10]

Q6. A) What is Wireless Sniffing. How does it work. Discuss the types of sniffing.

[10]

B) What Is Cloud Computing Security? Write its characteristics. Discuss the Cloud Computing Architecture.

[10]

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