

[UI9CS012]

**Sardar Vallabhbhai National Institute of Technology, Surat**  
**Computer Science and Engineering Department**  
**B.Tech. - IV (Computer Science and Engineering) Semester - VIII**  
**Subject – Ethical Hacking(CS456)**  
**Mid-Semester Exam March-2023**

**Date:** 11/03/2023

**Time:** 11:00 AM to 12:30 PM

**Marks:** 30

✓ Q.1 Answer the following (Any Two):

- a) What are the different attack vectors through which the attacker can attack the information system and also explain the terms- Virus, Worms, and Ransomware. [06]  
b) Explain website footprinting and how can "Whois" be used for footprinting? (3)

✓ Q.2 Answer the following:

- a) Explain the following terminologies: [06]  
i) Passive information gathering  
ii) Anonymous footprinting  
iii) Organizational or private footprinting  
iv) Active information gathering  
v) Pseudonymous footprinting  
vi) Internet footprinting

**OR**

- a) Explain the different methodologies used for footprinting. Explain the footprinting through search engines.

✓ Q.3 a) Explain CIA Triad, Threats, Vulnerabilities and Attacks with examples. [06]

Q.4 a) Differentiate between Nmap and Tcp dump? Explain the use of Tcp Dump. [06]

**OR**

b) What is Network Security and explain types of Network Security. [06]

Q.5 a) What is Information Gathering and what kind of Information can be gathered for web servers. Explain the same with one case study. [06]

**OR**

b) Explain Network Scanning through case study using Nmap.

→ (The harvestor)  
→ nation state  
net

→ port scan  
→ what to do to implement NS?  
→ IP  
→ DOS  
→ open ports  
→ x for the scanner  
→ logs  
→ alerts  
CH test (Security)