

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

U19CS012

[Exp-33]

Date: 06/05/2023

Time: 9:30 AM to 12:30 PM

Marks: 50

Q.1 Answer the following:

→ (a) Explain NetBIOS and NetBIOS enumeration

[6]

Left → (b) Explain in detail: Cyber kill chain and its 7 phases.

Q.2 Answer the following (Any Two):

[6]

✓(a) Write different TCP Flags with their names & functions. Explain in detail the TCP three-way handshake with a neat diagram and steps.

(b) Explain how malware gets distributed? What are the basic components of malware? Also differentiate between Trojans and Backdoors.

✓(c) What is vulnerability assessment? Explain it with vulnerability management life Cycle.

Q.3 Explain the following algorithms with examples:

[6]

✓(a) Symmetric Encryption

✓(b) Asymmetric Encryption

✓(c) Hashing Algorithm

Q.4 Answer the following:

[8]

✓(a) Distinguish between phishing and spoofing

(b) Explain network sniffing with an example.

Q.5 Answer the following (Any Two):

[8]

✓(a) What are the advantages and disadvantages of hacking?

✓(b) How to avoid ARP poisoning?

(c) Explain Network Enumeration with an example.

Q.6 Answer the following (Any Two):

[8]

✓(a) Enlist and explain various hacking stages.

✓(b) What is footprinting in ethical hacking? What are the techniques used for footprinting?

✓(c) Explain how you can stop your website getting hacked? Justify.

Q.7 Answer the following (Any Two):

[8]

(a) What is sniffing? Explain different types of sniffing in ethical hacking.

✓(b) Hypothetically, you are supposed to hack a system, how would you do it?

✓(c) How to do DNS Cache Poisoning?