

P P SAVANI UNIVERSITY
Seventh Semester of B. Tech. Examination
DECEMBER 2021

SEIT 4530 CYBER SECURITY

22.12.2021, Wednesday

Time: 9:00 a.m. To 11:30 p.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION - I

Q - 1 Answer the Following: (MCQ)

- (i) The mouse on your computer screen starts to move around on its own and click on things on your desktop. What do you do? [05]
- a) Call your co-workers over so they can see
 - b) Disconnect your computer from the network
 - c) Unplug your mouse
 - d) Tell your supervisor
 - e) Turn your computer off
 - f) Run anti-virus
 - g) All of the above
- Select all the options that apply.
- (ii) Below is a list of passwords pulled out a database. Which of the following passwords meets UCSC's password requirements?
- | | |
|---------------|--------------|
| a) @#*\$)*&^% | c) akHGksmLN |
| b) UcSc4Evr! | d) Password1 |
- (iii) A _____ tries to formulate a web resource occupied or busy its users by flooding the URL of the victim with unlimited requests than the server can handle.
- | | |
|--------------------|----------------|
| a) Phishing attack | c) DoS attack |
| b) Website attack | d) MiTM attack |
- (iv) In which of the following, a person is constantly followed/chased by another person or group of several peoples?
- | | |
|-------------|-------------------|
| a) Phishing | c) Bulling |
| b) Stalking | d) Identity theft |
- (v) _____ has now evolved to be one of the most popular automated tools for unethical hacking.
- | | |
|-------------------|----------------------|
| a) Automated apps | c) Database software |
| b) Malware | d) Worms |

Q - 2 (a) What is Cyber Security?

ii. What are the elements of Cyber Security? [05]

iii. What are the response codes that can be received from a Web Application?

iv. Differentiate between IDS and IPS

Explain the brute force attack. How to prevent it?

Q - 2 (b) How Are Biometric Technologies Being Deployed and How Likely Are They To Be Deployed In The Future? [05]

OR

Q - 2 (b) What is the major obstacle users faced when using SOAP? How will you secure SOAP services? [05]

Q - 3 (a) What is SSL? How does SSL work? [05]

Q - 3 (b) What are the laws of cyberspace? Enlist the different types of Cyber crimes in cyberspace? [05]

OR

- Q - 3 (a) Explain the three basic types of denial of service attacks? [05]
Q - 3 (b) Does international law matter in cyberspace? What is the role of international law in cyber security? [05]

- Q - 4 Attempt any one [05]
(i) How can malware infection be prevented? What type of malware prevents you from accessing files?
(ii) What are the kinds of attacks from which IPS protects the network? We know that IPS is dependent on IDS to understand the attack. How does IDS identify malicious traffic?

SECTION - II

- Q - 1 Answer the Following: (MCQ) [05]
(i) Which of these is a part of network identification?
a). User id b). Password
c). OTP d). Fingerprint
(ii) The man-in-the-middle attack can endanger the security of the diffie-hellman if two parties are not
a). authenticated b). joined
c). submit d). separate
(iii) Which of the following is not a transport layer vulnerability?
a). mishandling of undefined , poorly defined
b). the vulnerability that allows fingerprinting & other enumeration of host information
c). overloading of transporting layer mechanisms
d). unauthorized network access
(iv) The field that covers a variety of computer networks, both public and private, that are used in everyday jobs.
a) Artificial Intelligence b) ML
c) Network Security d) IT
(v) The process of verifying the identity of a user.
a) Authentication b) Identification
c) Validation d) Verification
Q - 2 (a) What is firewall ? What are the positive and negative effects of firewall? [05]
Q - 2 (b) Write short notes on [05]
(i). Security attacks
(ii). Security services.

OR

- Q - 2 (a) What do you understand by e-mail spoofing? Explain. [05]
Q - 2 (b) Explain Cyber Security Regulations [05]
Q - 3 (a) Write the differences between copy rights and patents? [05]
Q - 3 (b) What is cyber law? Write its advantages and disadvantages. [05]

OR

- Q - 3 (a) Explain in detail the basic concepts of (i)Confidentiality via. Encryption (ii)Authentication via. Digital Signature [05]
Q - 3 (b) Distinguished between Validation & Discrimination [05]
Q - 4 Attempt any one [05]
(i) Write short notes on the following
A. Firewall Configurations B. Viruses C. Trusted Systems D. Worms E. HTTPS
(ii) What is meant by Denial of Service (DOS), Spoofing & Phishing? Explain.
