

P.V.P SIDDHARTHA INSTITUTE OF TECHNOLOGY	
BRANCH : Computer Science & Engineering	REGULATION : PVP20
Course: B. Tech	SUBJECT : Cyber Security
Subject Code: 20CS4702C	Year and Semester: IV B.Tech – I Sem
QUESTION BANK	

### **UNIT I**

<b>Q. NO.</b>	<b>QUESTION</b>	<b>CO</b>	<b>LEVEL</b>
1 a)	What is cybercrime? How do you define it?	CO1	L2
1 b)	How do we classify cybercrimes? List a few cybercrimes in each.	CO1	L2
2	Explain the following terms: i) Cyberspace ii)Cybersquatting iii)Cyberpunk iv) Cyberterrorism	CO1	L2
3 a)	Is there a difference between "cybercrime" and "cyberfraud"? Explain.	CO1	L2
3 b)	How do viruses get disseminated? Explain with diagrams.	CO1	L2
4 a)	What are the different types of cybercriminals?	CO1	L2
4 b)	“Cybercrime is not a crime as it is a crime against software and not against a person or property”. Explain your inference on the statement	CO1	L2
5 a)	How do the legal systems around the world categorize the types of attacks and introduce laws to combat cybercriminals.	CO1	L2
5 b)	What could be possible financial losses occurring due to cyber-attacks.	CO1	L2
6 a)	Explain the cybercrimes on an individual?	CO1	L2
6 b)	Explain the role of computer as an object, tool and environment for performing cybercrimes.	CO1	L2
7 a)	Explain the cybercrimes on an organization?	CO1	L2
7 b)	Write a short notes on Online Fraud	CO1	L2
8 a)	Explain the cybercrimes against property?	CO1	L2
8 b)	Define spamming. Explain search index spamming.	CO1	L2
9 a)	How is internet used as a fuel for defamation	CO1	L2
9 b)	Explain how the pedophiles operate.	CO1	L2

10 a)	Explain the cybercrimes against society?	CO1	L2
10 b)	List a few motives behind hacking.	CO1	L2

## **UNIT II**

<b>Q. NO.</b>	<b>QUESTION</b>	<b>CO</b>	<b>LEVEL</b>
1 a)	How are cybercrimes classified? Explain with examples.	CO2	L2
1 b)	Explain the difference between passive and active attacks. Provide examples.	CO2	L2
2 a)	List a few tips for safety and security while using the computer in a cybercafé.	CO2	L2
2 b)	What is cyber stalking? What are types of stalkers, how does it work.	CO2	L2
3 a)	Explain how Botnets can be used as a fuel to cybercrime.	CO2	L3
3 b)	What are the different attacks launched with attack vector. Explain.	CO2	L3
4 a)	Explain cloud computing and cybercrime.	CO1	L3
4 b)	Explain the services provided by cloud computing.	CO2	L3
5 a)	What are possible network vulnerabilities on an organization network? Explain them with a diagram.	CO2	L3
5 b)	Who is White, Black & Brown hat hackers?	CO1	L2
6 a)	Write a short note on patriotic hacking.	CO2	L2
6 b)	What are the various phases involved in planning a cybercrime.	CO2	L2
7 a)	In the Reconnaissance phase how does attacker attempts to gather information using passive mechanism.	CO2	L3
7 b)	Explain few tips for effective search.	CO1	L2
8 a)	List a few network tools used for passive attacks.	CO2	L2
8 b)	Write short note on port scanning.	CO1	L2
9 a)	List a few tools used for active attacks.	CO2	L2

9 b)	Write shot notes on Human-Based Social Engineering.	CO1	L2
10 a)	List a few mechanisms that can be opt to limit the bot attacks on a system when using internet.	CO2	L3
10 b)	Write shot notes on Computer-Based Social Engineering.	CO1	L2

### **UNIT III**

<b>Q. NO.</b>	<b>QUESTION</b>	<b>CO</b>	<b>LEVEL</b>
1 a)	What are the "mobility types"! Quote day-to-day examples of your familiarity that relates to them.	CO3	L2
1 b)	What kinds of cyber security measures an organization should have to take in case of portable storage devices? Prepare security guidelines which can be implemented in an organization.	CO3	L3
2 a)	Discuss how "perception" makes people least suspect cyber security threats through mobile computing hand-held devices. What measures do you recommend against this situation?	CO3	L3
2 b)	Explain the various measures for protection of laptops through physical measures and logical access control measures. Prepare a laptop security checklist, apply it to the laptop owner in your educational institute. If you are employed, then find out your organization's laptop protection policy and related procedures.	CO3	L3
3 a)	What kinds of attacks are possible on mobile/cell phones? Explain with examples	CO3	L3
3 b)	What are the different types of mobile devices?	CO3	L2
4 a)	Explain the countermeasures to be practiced for possible attacks on mobile/cell phones.	CO3	L3
4 b)	List the key findings for mobile security scenario.	CO3	L2
5 a)	Enumerate on online environment for credit card transactions.	CO2	L3
5 b)	List the do's and don'ts to prevent credit card frauds.	CO2	L3
6 a)	What are the drawbacks of wireless processing that the users should be beware of.	CO3	L3
6 b)	Explain the traditional and modern techniques of credit card fraud.	CO2	L3
7 a)	Explain about registry settings for mobile devices.	CO3	L3

7 b)	What is Smishing? How to protect from Smishing attacks.	CO3	L2
8 a)	Explain about push and pull based attacks on mobile devices with necessary diagrams.	CO3	L3
8 b)	What are the common attacks on Bluetooth	CO3	L2
9 a)	Explain about LDAP directory and security for mobile devices.	CO3	L3
9 b)	Explain how RAS system security is designed for Mobile devices.	CO3	L3
10 a)	List a few security measures for securing your Cell/Mobile Phone from being Stolen/Lost	CO3	L2
10 b)	Explain how organizations handle physical security countermeasures.	CO2	L3

#### **UNIT IV**

<b>Q. NO.</b>	<b>QUESTION</b>	<b>CO</b>	<b>LEVEL</b>
1 a)	What are the different phases during the attack on the network?	CO2	L2
1 b)	What is SQL injection and what are the different countermeasures to prevent the attack?	CO2	L3
2 a)	What is the difference between proxy server and an anonymizer?	CO2	L2
2 b)	What are different buffer overflow attacks?	CO2	L2
3 a)	What are the different ways of password cracking?	CO2	L3
3 b)	Explain the following terms: i) Scareware      ii) Malvertising iii) Clickjacking      iv) Ransomware	CO2	L3
4 a)	How can key-loggers be used to commit a cybercrime?	CO2	L2
4 b)	What is Blind SQL injection attack? Can it be prevented?	CO2	L3
5 a)	What is the difference between a virus and a worm?	CO2	L2
5 b)	What is Phishing? How does it work?	CO2	L3
6 a)	What are the functions of backdoor? How to protect from backdoors and Trojans.	CO2	L3
6 b)	How can we classify password cracking attacks.	CO2	L2

7 a)	What is the difference between Trojan Horses and backdoors?	CO2	L2
7 b)	What are the various types of viruses?	CO2	L2
8 a)	What is the difference between steganography and cryptography?	CO2	L2
8 b)	What is Strong, weak and random passwords? Explain about password policies that should be implemented in organization.	CO2	L3
9 a)	What is the difference between DoS and DDoS?	CO2	L2
9 b)	With neat diagrams explain how virus spreads.	CO2	L3
10 a)	Are countermeasures employed against steganography? Explain.	CO2	L3
10 b)	What are the various mechanisms to protect from DoS/DDoS attacks?	CO2	L3

### **UNIT V**

<b>Q. NO.</b>	<b>QUESTION</b>	<b>CO</b>	<b>LEVEL</b>
1 a)	What is “security breach”? Explain the impact it has on an organization. Provide examples from observations you may have made.	CO4	L3
1 b)	Prepare a short note on evils and perils of cyber threats for organizations.	CO4	L3
2 a)	What is meant by insider threat? How does it affect an organization?	CO4	L2
2 b)	Can cookies impact data security and personal security? Explain how.	CO4	L3
3 a)	What are PI and SPI? Explain with appropriate examples.	CO4	L3
3 b)	Describe any three of the “fair information practices” in context cookie usage in website design.	CO4	L3
4 a)	Do you see a pattern in today’s cyber security threats? What are your comments on the sophistication of cyber security attacks?	CO4	L4
4 b)	Explain the organizations proactive and reactive approach to security.	CO4	L3
5 a)	Are information security and cyber security two independent domains. Explain your answer with examples to support your rationale.	CO4	L3
5 b)	What are the various ways to classify mobile workforce/remote workers?	CO4	L3
6 a)	What are the four dimensions of “privacy”? Do they all relate to data security. Justify your answer with suitable examples.	CO4	L3

6 b)	Should organizations monitor employees' "internet surfing"? Provide two arguments in favor of monitoring and two against it. Provide rationale for both sides of argument.	CO4	L4
7 a)	What are some of the key challenges to organizations? Describe them briefly.	CO4	L3
7 b)	What are some of the challenges brought by the rise in workforce mobility?	CO4	L3
8 a)	Are there any costs associated with cyber-crimes? What are the typical components of those costs? Do you see pattern in those costs? Explain.	CO4	L4
8 b)	What is cloud computing? Is it completely safe? What are some challenges associated with cloud computing.	CO4	L3
9 a)	When it comes to forensic investigations, owing to its nature, there are certain aspects which often are exploited by cyber attackers/ cyber criminals. What are those aspects?	CO4	L4
9 b)	What do you think about the use of social media marketing tools? What are some of the benefits and some of the associated threats? What care should organization take?	CO4	L4
10 a)	How does software piracy impact organizations. What care should be taken by organizations?	CO4	L3
10 b)	Is "social computing" same as "social media marketing"? In what way two are related if at all.	CO4	L3

**1:**

**2:**

**3:**

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