GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–V (NEW) EXAMINATION – WINTER 2020

Subject Code:3150714   **Date:22/01/2021**
Subject Name:Cyber Security
Time:10:30 AM TO 12:30 PM   **Total Marks: 56**

Instructions:
1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

			MARKS
Q.1	(a)	What is vulnerability in the Internet Crime.	03
	(b)	Explain Wireshark and how do we use Wireshark to find a password in network?	04
	(c)	Explain passive attacks and active attacks with respect to cyber criminals?	07
Q.2	(a)	What is the difference between Threat, Vulnerability, and Risk?	03
	(b)	Brief Intrusion prevention system - snort? What is the difference between IPS and IDS?	04
	(c)	Describe credit card fraud that can be done through mobile or other wireless devices.	07
Q.3	(a)	Discuss advantages and disadvantages of NAT.	03
	(b)	Discuss Traditional Problems Associated with Computer Crime.	04
	(c)	What is Pix Firewall Security? How does it differ from a firewall?	07
Q.4	(a)	How does Zed Attack Proxy work?	03
	(b)	What is contemporary approach in criminology in the world of computer science.?	04
	(c)	What is Cybercrime? Explain different types of Cybercrimes in detail.	07
Q.5	(a)	Explain the need of Digital Forensics.	03
	(b)	Describe Steganography.	04
	(c)	List Brute Force Tools with brief explanation and describe how to Prevent Brute Force Password Hacking?	07
Q.6	(a)	What is the need of cyber law in India?	03
	(b)	How Buffer overflow attack works?	04
	(c)	What is Hacking? Explain types of Hackers.	07
Q.7	(a)	How can we prevent DDOS attack?	03
	(b)	Explain attacks on wireless network.	04
	(c)	Which tools are used for password cracking?	07
Q.8	(a)	What is SQL injection?	03
	(b)	Explain Virus and Worms, Trojan Horses and Backdoors.	04
	(c)	Why Keyloggers are a threat? How cyber criminals use Keyloggers?	07

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Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–V (NEW) EXAMINATION – WINTER 2021

Subject Code:3150714   **Date:15/12/2021**
Subject Name:Cyber Security
Time:02:30 PM TO 05:00 PM   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

                                                                                          MARKS

Q.1	**(a)**	Explain Vulnerability Scanning.	**03**
	(b)	Define the term in briefly: (i) Open Port Identification (ii) Banner Check	**04**
	(c)	Describe Network Sniffers and Injection Tool. Explain any two injection tools in brief.	**07**
Q.2	**(a)**	Define Network Address Translation.	**03**
	(b)	What is Probe. Explain its different types.	**04**
	(c)	Differentiate between Packet Filter and Firewall.	**07**
		OR	
	(c)	Differentiate between Stateless and Stateful Firewalls.	**07**
Q.3	**(a)**	Define Snort.	**03**
	(b)	What are the different usages of Network Sniffers? List out it.	**04**
	(c)	List out various Application Inspection tools. Explain any two.	**07**
		OR	
Q.3	**(a)**	How do you protect Wireless Network?	**03**
	(b)	What do you mean by Password cracking and brute force tools? Explain any one in brief.	**04**
	(c)	What are the different kinds of Web Vulnerabilities Tools available? Explain any two in brief.	**07**
Q.4	**(a)**	Define Denial-of-Service.	**03**
	(b)	Justify the attack vector. List out different types of attack vector.	**04**
	(c)	What is Firewall and illustrate its different types.	**07**
		OR	
Q.4	**(a)**	Illustrate the aim and objective of Indian IT ACT 2000.	**03**
	(b)	List out different types of Traditional Problems Associated with Computer Crime.	**04**
	(c)	What is Incident Response. Explain it process flow with appropriate diagram.	**07**
Q.5	**(a)**	Define the term: (i)Trojan Horse (ii)Spyware	**03**
	(b)	What is Destruction of Data. List out the different reason for it.	**04**
	(c)	What are the Cyber-Crime Scenarios and explain its applicability for Legal Sections?	**07**
		OR	
Q.5	**(a)**	What is Keyloggers? Explain different types of Keyloggers.	**03**
	(b)	Differentiate between Computer Viruses and Worms.	**04**
	(c)	Define the Cyber Crime in your own word. Explain the different type of classification of Cyber Crime.	**07**

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GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–V (NEW) EXAMINATION – SUMMER 2021

Subject Code:3150714   **Date:07/09/2021**

Subject Name:Cyber Security

Time:10:30 AM TO 01:00 PM   **Total Marks: 70**

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

			Marks
Q.1	**(a)**	What is Vulnerability? Give small example	03
	(b)	Write short note on Nmap and Netcat	04
	(c)	What is OpenVas? Write advantage and disadvantage of OpenVas.	07
Q.2	**(a)**	Write benefits of Metasploit	03
	(b)	Explain Following terms: 1. Datapipe 2. Fpipe 3.WinRelay 4.Traffic Probe	04
	(c)	Describe Network Sniffers with suitable example.	07
		OR	
	(c)	Explain different functionally provide by Wireshark.	07
Q.3	**(a)**	What is Packet Filter Vs Firewall?	03
	(b)	Difference between Stateless Vs Stateful Firewalls.	04
	(c)	Explain in details: Network Address Translation (NAT) with suitable diagram.	07
		OR	
Q.3	**(a)**	What is Port Forwarding?	03
	(b)	Write short note on Tcpdump and Windump.	04
	(c)	Describe all HTTP utilities in details.	07
Q.4	**(a)**	Brief out the Sqlmap.	03
	(b)	Give brief introduction of Brute-Force Attack.	04
	(c)	List down the Application Inspection tools. Explain any two in details.	07
		OR	
Q.4	**(a)**	What is Cyber Crime? Explain with example.	03
	(b)	Explain types of Cyber Crimes.	04
	(c)	Explain in details: Hacking, Attack vectors, Cyberspace and Criminal Behavior.	07
Q.5	**(a)**	What is Digital Forensics?	03
	(b)	List down and explain Contemporary Crimes.	04
	(c)	Describe DOS and DDOS attack with suitable example.	07
		OR	
Q.5	**(a)**	What is Virus and Warms?	03
	(b)	Explain in details: Buffer Overflow.	04
	(c)	Which types of attack possible on wireless Networks? Explain in details.	07

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–V(NEW) EXAMINATION – SUMMER 2022

Subject Code:3150714   **Date:02/06/2022**
Subject Name:Cyber Security
Time:02:30 PM TO 05:00 PM   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

			Marks
Q.1	**(a)**	Explain the terms : Datapipe, Fpipe and WinRelay.	**03**
	(b)	What do you mean by Vulnerability? Explain types of vulnerabilities in detail with its example.	**04**
	(c)	What is Cybercrime? Explain the different categories of cybercrime in details.	**07**
Q.2	**(a)**	What is Metasploit? Explain payload types in short.	**03**
	(b)	What is Firewall? Explain its type with rules in detail.	**04**
	(c)	What is Nmap? Explain different functionality with its command in detail.	**07**
		OR	
	(c)	What is Netcat? Explain steps for File Transfer process by using Netcat in detail.	**07**
Q.3	**(a)**	Write a short note on 'Curl'.	**03**
	(b)	Describe Snort in detail.	**04**
	(c)	What is NAT? Describe port forwarding with its types in detail.	**07**
		OR	
Q.3	**(a)**	Write a short note on 'Nikto'.	**03**
	(b)	Explain DOS and DDOS Attack in detail.	**04**
	(c)	What is a DVWA? Explain SQL injection in DVWA with example in detail.	**07**
Q.4	**(a)**	Write a short note on Cyberspace.	**03**
	(b)	Explain Hydra in detail with example.	**04**
	(c)	What is XSS? Explain iframe and cookie vulnerability by using XSS in detail.	**07**
		OR	
Q.4	**(a)**	Write a short notes on 'Digital Forensic'.	**03**
	(b)	What is ZAP? Explain its uses and features in detail.	**04**
	(c)	What do you mean by Brute force attack? Explain its type with example in detail.	**07**
Q.5	**(a)**	Write a short notes on 'Steganography'.	**03**
	(b)	Describe Phishing in detail with example..	**04**
	(c)	Explain IT-Act 2000 in brief. List out different sections under IT-Act 2000 and explain any four in detail.	**07**
		OR	
Q.5	**(a)**	Explain the term: Buffer Overflow	**03**
	(b)	What do you mean by Hacker? Explain its type in detail.	**04**
	(c)	Explain Virus, worms, Trojan Horses and backdoors in detail with example.	**07**

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