GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–V (NEW) EXAMINATION – WINTER 2024

Subject Code:3154207   **Date:20-12-2024**

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 do you mean by Vulnerability? Explain any Two types of vulnerabilities.	**03**
	(b)	What is Cybercrime? Explain the different categories of cybercrime in details.	**04**
	(c)	Explain passive attacks and active attacks with respect to cyber criminals?	**07**
Q.2	**(a)**	Explain DOS and DDOS Attack in detail	**03**
	(b)	Difference between Stateless Vs Stateful Firewalls.	**04**
	(c)	Explain SOCAT and NETCAT using suitable example in detail.	**07**
		OR	
	(c)	What is NAT? Describe port forwarding with its types in detail.	**07**
Q.3	**(a)**	Explain Vulnerability Scanning	**03**
	(b)	Justify the attack vector. List out different types of attack vector	**04**
	(c)	What is a DVWA? Explain SQL injection in DVWA with example in detail.	**07**
		OR	
Q.3	**(a)**	Illustrate the aim and objective of Indian IT ACT 2000	**03**
	(b)	Define Curl, OpenSSL and Stunnel.	**04**
	(c)	Explain Metasploit and Nmap	**07**
Q.4	**(a)**	What do you mean by Password cracking and brute force tools? Explain any one in brief	**03**
	(b)	What is Keyloggers? Explain different types of Keyloggers	**04**
	(c)	What is Digital Forensics? Explain the need of Digital Forensics.	**07**
		OR	
Q.4	**(a)**	Discuss Traditional Problems Associated with Computer Crime	**03**
	(b)	Explain advantages and disadvantages of NAT	**04**
	(c)	Explain Hydra in detail with example.	**07**
Q.5	**(a)**	List four functions a backdoor can do to help the attacker	**03**
	(b)	What is ZAP? Explain its uses and features in detail	**04**
	(c)	What is Incident Response? Explain it process flow with appropriate diagram.	**07**
		OR	
Q.5	**(a)**	List three contemporary crimes?	**03**
	(b)	Explain hacking and its types.	**04**
	(c)	Explain Virus and Worms, Trojan Horses and Backdoors in detail.	**07**

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