GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER - III EXAMINATION - WINTER 2025

Subject Code: 639410   **Date: 24-11-2025**

Subject Name: Network and 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. Use of simple calculators and non-programmable scientific calculators are permitted.

			Marks
Q.1	**(a)**	Explain dynamic host configuration protocol.	**07**
	(b)	Explain terms: Encryption, Decryption, Plain Text, Cipher Text.	**07**
Q.2	**(a)**	What is OS Fingerprinting? Explain active and passive fingerprinting.	**07**
	(b)	Explain public key cryptography.	**07**
		OR	
	(b)	Explain ARP poising and MAC spoofing.	**07**
Q.3	**(a)**	Explain firewall and its types.	**07**
	(b)	Explain wireless communication standards.	**07**
		OR	
	(a)	Explain WHOIS and DNS lookup.	**07**
	(b)	Explain SNORT-NIDS.	**07**
Q.4	**(a)**	Explain traffic timeline analysis in Wireshark.	**07**
	(b)	Explain IP security architecture.	**07**
		OR	
	(a)	What is banner grabbing? Explain types of banner grabbing.	**07**
	(b)	Explain internet security protocols.	**07**
Q.5	**(a)**	Explain port scanning and its techniques.	**07**
	(b)	What is Wireshark? Explain Wireshark Plugins.	**07**
		OR	
	(a)	Explain internet key exchange.	**07**
	(b)	Explain intrusion detection system.	**07**

***