Enrolment No./Seat No_____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.VOC- SEMESTER–VI EXAMINATION – WINTER 2024

Subject Code:21160203   **Date:25-11-2024**
Subject Name: Computer Network Security
Time:02:30 PM TO 04:30 PM   **Total Marks:50**
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.**

Q.1	**(a)**	Explain following networking terms in brief: HTTP, HTTPS, SMTP, Telnet, ADSL	**05**
	(b)	What is Topology? Explain various network topologies in detail.	**05**
Q.2	**(a)**	Explain various switching technologies.	**05**
	(b)	Explain various LAN Switch types.	**05**
		OR	
	(b)	Explain Half and Full-Duplex Ethernet in detail.	**05**
Q.3	**(a)**	What is IP address? Explain sub netting with example.	**05**
	(b)	Explain the use of following Internet Layer Protocols: IP, ICMP, IGMP, ARP, RARP	**05**
		OR	
Q.3	**(a)**	Explain classless addressing in detail.	**05**
	(b)	Give the difference between IPv4 and IPv6.	**05**
Q.4	**(a)**	Write a short note on FTP.	**05**
	(b)	How HTTP works? Explain in brief.	**05**
		OR	
Q.4	**(a)**	Write a short note on DNS.	**05**
	(b)	Give the difference between TCP and UDP.	**05**
Q.5	**(a)**	What is Cryptography? List and explain types of it.	**05**
	(b)	Explain Playfair cipher technique in detail. Find cipher text for plain text 'UNIVERSITY' using 'HELLO' as key.	**05**
		OR	
Q.5	**(a)**	Write a short note on "Digital Signature Algorithm".	**05**
	(b)	Explain Playfair cipher technique in detail. Find cipher text for plain text 'GTUCNSEXAM' using 'STUDY' as key.	**05**

****