GUJARAT TECHNOLOGICAL UNIVERSITY
B.VOC - SEMESTER– IV EXAMINATION – SUMMER 2024

Subject Code: 1140502   **Date:17-05-2024**

Subject Name: Computer Network and Security

Time:10:30 AM TO 12:30 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.**

			Marks
Q.1	**(a)**	What is Topology? Explain various network topologies in detail.	**05**
	(b)	Draw and explain OSI Model in detail. Explain functionality of each layer.	**05**
Q.2	**(a)**	What is Computer Network? List and explain types of networks.	**05**
	(b)	Explain Half and Full-Duplex Ethernet in detail.	**05**
		OR	
	(b)	Explain various switching technologies.	**05**
Q.3	**(a)**	Give the difference between IPv4 and IPv6.	**05**
	(b)	Explain different classes of IP address.	**05**
		OR	
Q.3	**(a)**	Give the difference between TCP and UDP.	**05**
	(b)	Explain classless addressing in detail.	**05**
Q.4	**(a)**	Write a short note on DNS.	**05**
	(b)	Explain symmetric and asymmetric cryptography in detail.	**05**
		OR	
Q.4	**(a)**	Write a short note on FTP.	**05**
	(b)	Define Cryptography and Cryptanalysis. Draw and explain conventional cryptosystem.	**05**
Q.5	**(a)**	Explain Digital Signature Algorithm in detail.	**05**
	(b)	What is DHCP? How DHCP protocol works?	**05**
		OR	
Q.5	**(a)**	Explain RSA Algorithm in detail.	**05**
	(b)	Discuss transport layer multiplexing and De-multiplexing concept.	**05**

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