Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER–VIII • EXAMINATION – SUMMER • 2014

Subject Code: 183202 **Date: 05-06-2014**

Subject Name: System and Network Security

Time: 10:30 am - 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.**

Q.1	**(a)**	Explain design issues in layers. Also discuss critique of the OSI and TCP.	**07**
	(b)	Explain X.25 and ATM network.	**07**
Q.2	**(a)**	Explain security architecture of OSI.	**07**
	(b)	What is a security attack? Explain the security mechanism to prevent attacks.	**07**
		OR	
	(b)	Explain network security model.	**07**
Q.3	**(a)**	Explain substitution and transposition techniques.	**07**
	(b)	Explain data encryption and advance encryption standards.	**07**
		OR	
Q.3	**(a)**	Explain RSA algorithm with an example.	**07**
	(b)	Explain Deffie-Hellman key exchange technique.	**07**
Q.4	**(a)**	Explain digital signature concept in network security and also discuss authentication protocols.	**07**
	(b)	Explain IP Security Architecture.	**07**
		OR	
Q.4	**(a)**	Define intruders? Explain intrusion detection technique in web security.	**07**
	(b)	Explain Service attacks of Distributed Denial.	**07**
Q.5	**(a)**	What is X.509 Authentication Services? Explain.	**07**
	(b)	Define DSS. Discuss with example.	**07**
Q.5	**(a)**	Is electronic transaction secure? explain secure electronic transaction in web security	**07**
	(b)	How to manage password in web security? Explain password management in web security.	**07**

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