

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – III • EXAMINATION – WINTER • 2014****Subject code: 735302****Date: 25-11-2014****Subject Name: Security in Wireless and Mobile System****Time: 02:30 pm - 05:00 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)** What is cryptography? What are the goals of cryptography? Explain Strength of cryptosystems **07**
- (b)** What is DoS attack? List out and explain various types of DoS attacks in detail. What are the consequences of DoS attack in MANET? **07**
- Q.2 (a)** Explain the PKI ? write about Registration Authority in detail. **07**
- (b)** Explain DES in detail. **07**
- OR**
- (b)** Explain Byte substitution and Shift row operation of AES in detail. **07**
- Q.3 (a)** Explain main differences between Symmetric Key and Asymmetric Key Algorithms with an example. **07**
- (b)** Explain the digital signature in security field. **07**
- OR**
- Q.3 (a)** List out four classification of network attacks, and explain each in detail. **07**
- (b)** What is Spoofing? Explain IP Spoofing in detail. **07**
- Q.4 (a)** P and Q are two prime numbers. $P=7$, and $Q=17$. Take public key $E=5$. If plain text value is 5, then what will be cipher text value according to RSA algorithm? Explain each steps in detail. **07**
- (b)** What is cyber bullying? How to protect against it? **07**
- OR**
- Q.4 (a)** Explain CIA triad. **07**
- (b)** What is malware? Clarify the difference between virus, worm and Trojan. **07**
- Q.5 (a)** Explain Zero knowledge protocol in detail. **07**
- (b)** List out authentication protocols. Explain EAP in detail. **07**
- OR**
- Q.5 (a)** Explain active attack and passive attack in detail with relevant examples. **07**
- (b)** What is Pharming attack? How it could be hazardous in wireless Networking scenario? **07**
