

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA – SEMESTER – 5 • EXAMINATION – SUMMER 2018****Subject Code: 650002****Date: 02-May-2018****Subject Name: Network Security (NS)****Time: 10.30 am to 1.00 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) Briefly explain the following terms** **07**
1. Security Service
 2. Digital Signature
 3. Message Confidentiality
 4. Honey Pot
 5. Data Integrity
 6. Non Repudiation
 7. Stream Cipher
- (b)** **07**
1. Differentiate between Security Threat and Security Attack
 2. Explain Authentication server.
- Q.2 (a)** Explain with example: Active and Passive attack. **07**
- (b)** Discuss RC4 Algorithm with example. **07**
- OR**
- (b)** Explain the concept of ESP. **07**
- Q.3 (a)** Explain public key infrastructure. **07**
- (b)** Explain cipher block modes in detail. **07**
- OR**
- Q.3 (a)** Discuss KERBEROS with its different versions. **07**
- (b)** Explain the services of PGP. **07**
- Q.4 (a)** **04**
1. Explain HMAC. **03**
 2. Write a note on anti reply window. **07**
- (b)** Explain IP security and its architecture. **07**
- OR**
- Q.4 (a)** Discuss SSL protocol and it's architecture. **07**
- (b)** What are Intruders? Explain its category. **07**
- Q.5 (a)** Explain the importance of security in today's scenario. **07**
- (b)** What is Firewall? Discuss its importance. **07**
- OR**
- Q.5 (a)** Explain the guidelines of creating secure password. **07**
- (b)** Define SET and its participants. **07**
