

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2014****Subject code: 2725103****Date: 20-06-2014****Subject Name: Information System and Network Security****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.**

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|------------|------------|---|-----------|
| Q.1 | (a) | Explain the importance of management role in implementing information security in an organization? | 07 |
| | (b) | Explain briefly the steps of AES encryption process? | 07 |
| Q.2 | (a) | Explain briefly the steps of DES encryption process? | 07 |
| | (b) | Explain the various risk mitigation methods? | 07 |
| | | OR | |
| | (b) | Describe an information system, types and how it helps organizations? | 07 |
| Q.3 | (a) | Explain the risk assessment process? | 07 |
| | (b) | Explain Information security and three pillars of information security? | 07 |
| | | OR | |
| Q.3 | (a) | Explain the Security Policies and Measures in Mobile Computing? | 07 |
| | (b) | Distinguish between qualitative and quantitative risk assessment method? | 07 |
| Q.4 | (a) | Explain management controls? | 07 |
| | (b) | Explain in detail the classification of threats and attacks? | 07 |
| | | OR | |
| Q.4 | (a) | Explain the working of the RSA algorithms? | 07 |
| | (b) | Write a note on cryptography? | 07 |
| Q.5 | (a) | Explain in detail the multilevel authorization mechanisms. List the advantages of multilevel authorization? | 07 |
| | (b) | Write a note on the security protocols? | 07 |
| | | OR | |
| Q.5 | (a) | Explain in detail the different layers of OSI architecture? | 07 |
| | (b) | Write a detailed note on the authentication mechanisms? | 07 |
