

Total No. of Questions: 18

B.Tech.(IT) (2012 to 2017) (Sem.-6)

INFORMATION SECURITY AND RISK MANAGEMENT

Subject Code: BTIT-602 M.Code: 71172

Time: 3 Hrs. Max. Marks: 60

### **INSTRUCTION TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## **SECTION-A**

# **Answer briefly:**

- 1. What is role of cryptography?
- 2. What are worms in Information Security?
- 3. Discuss *SHA2* hash function.
- 4. What are digital signatures?
- 5. Give the role of Key management in cryptography.
- 6. Define message integrity.
- 7. What is the goal of a *DoS* attack?
- 8. Write the purpose of *MD4*.
- 9. What is threat assessment?
- 10. Write the syntax of RSA algorithm.

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### **SECTION-B**

- 11. How firewalls are used to prevent the threats in information security?
- 12. What is a DMZ and why would we use it?
- 13. What are the message authentication functions? What are its requirements?
- 14. How Pretty Good Privacy is used for sending secure encrypted messages in network?
- 15. Discuss the role of qualitative risk analysis in risk management.

## **SECTION-C**

- 16. Explain the importance of DES algorithm using the block diagram. Discuss the modified mode AES.
- 17. Discuss the Web Security issues. Which are the key Web services security requirements?
- 18. What is risk management process? How would you identify, analysis and evaluate the risk?

NOTE: Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC against the Student.

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