

Code No: 824BC

R15**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA V Semester Examinations, June/July - 2018****PRINCIPLES OF INFORMATION SECURITY****Time: 3hrs****Max.Marks:75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**5 × 5 Marks = 25**

- 1.a) What are the components of information security? Explain briefly. [5]
- b) Describe digital millennium copy right act. [5]
- c) Explain the mechanisms of access control. [5]
- d) Describe Vernam and Ex-or ciphers with an example. [5]
- e) Describe the goals and team of digital forensic. [5]

PART - B**5 × 10 Marks = 50**

- 2.a) Describe the various phases of information security.
- b) Explain information extortion? Describe how such an attack can cause losses. [5+5]

OR

- 3.a) Explain, the problem arises in software development security.
- b) What is information system? Explain its components. [5+5]

4. What is Enterprise information security policy? Explain in detail its components. [10]

OR

5. Discuss about five elements of business impact analysis for information security. [10]

6. Give a detailed note on components of risk identification in information security. [10]

OR

- 7.a) Describe virtual private networks.
- b) Explain network intrusion detection and prevention system. [5+5]

8. Explain RSA algorithm and write its strengths and weaknesses. [10]

OR

9. Explain components of public key infrastructure. [10]

10. Describe the life cycle of information security services. [10]

OR

- 11.a) Explain various method to acquire forensic data.
- b) Explain vulnerability assessment of security maintenance model. [5+5]

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