

R09

Code No: 56030

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech III Year II Semester Examinations, November/December - 2015

NETWORK SECURITY

(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Define Interruption, Interception, Fabrication, and Modification. Explain.
b) Draw the Internet Security Model and explain.
c) Briefly explain ARP attacks. [5+5+5]
- 2.a) Explain about AES algorithm in detail.
b) Write notes on key distribution Approaches of Message Authentication. [10+5]
- 3.a) What are the principal elements of a public key cryptosystem?
b) What are the three broad categories of application of public key cryptosystems?
c) Explain X.509 Directory Authentication Service. [4+3+8]
4. Explain PGP in detail. [15]
- 5.a) Explain IPSec Authentication Header with a neat diagram.
b) Write notes on Key Management of IPSec. [8+7]
- 6.a) List and briefly define the parameters that define an SSL session state.
b) What is a dual signature and what is its purpose?
c) What steps are involved in SSL record protocol transmission? [4+4+7]
- 7.a) List and briefly define three classes of Intruders.
b) What are the typical phases of operation of a Virus?
c) Write notes on worms. [4+6+5]
- 8.a) List the three design goals for a Firewall.
b) What are the two rules that a reference monitor enforces?
c) Briefly explain statistical anomaly detection and rule-based intrusion identification. [3+4+8]

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