

**R09**

Code No: 09A60503

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech III Year II Semester Examinations, May – 2013

Network Security

(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

Answer any five questions

All questions carry equal marks

- 1.a) Explain the various security services.  
b) Explain the Internet standards and RFCs. [15]
- 2.a) What are block Cipher modes and what is their significance?  
b) What are the issues in locating the encryption devices? Explain.  
c) Explain the characteristics of a good hash function. [15]
- 3.a) Write RSA algorithm and perform encryption and decryption using RSA when  $p = 13$ ,  $q = 11$ ,  $e = 7$  and  $m = 5$ .  
b) Explain X.509 Directory Authentication Service. [15]
4. What are the services provided by PGP? Explain in detail about each of them. [15]
- 5.a) Describe the architecture of IP security.  
b) Explain the purpose of combining security associations in IP security and how is it performed. [15]
- 6.a) Explain the requirements of web security.  
b) Explain about the security in socket layer. [15]
7. Explain the various viruses and related threats. [15]
8. Explain the Intrusion Detection Systems. [15]

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