

**Code No: B2501**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD  
M.TECH II SEMESTER EXAMINATIONS, APRIL/MAY 2012  
INFORMATION SECURITY  
(SOFTWARE ENGINEERING)**

**Time: 3hours**

**Max.Marks:60**

**Answer any five questions  
All questions carry equal marks**

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- 1.a) Define the three security goals.  
b) Explain TCP session hijacking.  
c) Write notes on man-in-middle attack.
  
- 2.a) Explain mono alphabetic cipher and poly alphabetic cipher with examples.  
b) List ways in which secret keys can be distributed to two communicating parties. Explain them.
  
- 3.a) Explain ECC algorithm.  
b) Explain X.509 directory services.
  
- 4.a) What are the five principal services provided by PGP? Explain.  
b) Write notes on S/MIME functionality.
  
- 5.a) What parameters identify an SA and what parameters characterize the nature of a particular SA?  
b) What are the roles of Oakley key determination protocol and ISAKMP in IPsec?
  
- 6.a) Write notes on SSL connection and SSL session.  
b) What steps are involved in the SSL Record Protocol transmission?
  
- 7.a) What are the two common techniques used to protect a password file?  
b) What are the key elements of SNMP model?  
c) Write short notes on key localization.
  
- 8.a) What are the four techniques used by a firewall to control access and enforce a security policy?  
b) What are the two rules that a reference monitor enforces?  
c) What properties are required by a reference monitor?

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