

**R09**

Code: 9A05709

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

**INFORMATION SECURITY**

(Common to CSE &amp; CSS)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) What is meant by security attack? Explain various types of security attacks.  
(b) Explain about substitution ciphers in detail with an example.
- 2 (a) What is the structure of virus?  
(b) Write short notes on non malicious program errors.
- 3 (a) Explain the process involved in message digest generation and processing of single block in SHA-512.  
(b) What are the approaches of message authentication? Explain them.
- 4 (a) Distinguish between direct and arbitrated digital signature.  
(b) Write short notes on authentication protocols.
- 5 (a) Write and explain client/server authentication exchange service in Kerberos.  
(b) What is S/MIME? Explain S/MIME in detail.
- 6 Draw and discuss the architecture of IP security.
- 7 Explain in detail the operation of secure socket layer in detail.
- 8 Write short notes on:  
(a) Intrusion detection.  
(b) Trusted system.

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