

Code No: H4002/R13

M. Tech. II Semester Supplementary Examinations, May-2017

INFORMATION SECURITY

(Common to IT, CS, CS&T and CS&E)

Time: 3 Hours**Max. Marks: 60**

Answer any FIVE Questions
All Questions Carry Equal Marks

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| 1. a | Define security service. List different categories security services and explain. | 6M |
| b | Write notes on Routing table modification and ARP attacks. | 6M |
| 2. a | Given Cipher text “YMJTYMJWXNIJTKXNQJSHK”, knowing the message is encrypted by Caesar cipher and $k=5$. Try to decrypt the message. | 6M |
| b | Explain about various key distribution approaches of message authentication. | 6M |
| 3. a | Explain the importance of Kerberos and give its requirements. | 6M |
| b | Explain the procedure involved in RSA public-key encryption algorithm. | 6M |
| 4. a | Discuss about encapsulating security payload of IP? | 6M |
| b | Show how the S/MIME certification process is carried out. | 6M |
| 5. a | What are the different types of viruses? How do they get into the systems? | 6M |
| b | Evaluate how firewall is different from intrusion detection system? | 6M |
| 6. a | Explain symmetric cipher model with neat block diagram. | 6M |
| b | Explain any two cipher block modes of operations in detail. | 6M |
| 7. a | Explain in detail Digital Signature Standard approach and its algorithm | 6M |
| b | What is the use of SSL protocol? Explain SSL record protocol operation with SSL record format. | 6M |
| 8. a | Explain the need for trusted systems. | 6M |
| b | Write notes on SNMPv1 | 6M |
