

Code No: I6811/R16

M. Tech. I Semester Regular/Supple Examinations, Jan/Feb-2018

**NETWORK SECURITY & CRYPTOGRAPHY**

**Common to VLSI&ES (68), ES&VLSI (48), VLSID &ES (77), ES &VLSID (81), SSP(45), DIP(63), CE&SP(46), IP(10), C & SP (80), Embedded Systems (55), Digital Systems & Computer Electronics (06), DECS (38), ECE (70), DECE (37), Communication Systems (47)**

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

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*Answer any FIVE Questions  
All Questions Carry Equal Marks*

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| 1. a | Discuss with neat sketch a network security model.   | 6M |
| b    | Differentiate passive attack from active attack with example.                                      | 6M |
| 2. a | What is the difference between differential and linear cryptanalysis?                              | 6M |
| b    | How is expansion permutation function done in DES?   | 6M |
| 3. a | Explain the compression of Secure Hash Algorithm.  | 6M |
| b    | What are the requirements of hash functions?   | 6M |
| 4. a | Describe RIPEMD-160 algorithm in detail and compare its performance with SHA                       | 6M |
| b    | Write a short note on X.509 directory Authentication service.                                      | 6M |
| 5. a | Explain the architecture of IP security and mention the benefits and services of it.               | 6M |
| b    | Differentiate Secure sockets layer from Secure Electronic Transaction.                             | 6M |
| 6. a | Explain in detail about various types of attacks.  | 6M |
| b    | Write short notes on Steganography and mention the advantages of Steganography over cryptography . | 6M |
| 7. a | Define virus? Briefly explain the phases of virus  | 6M |
| b    | Describe the Fire wall Design Principles in detail   | 6M |
| 8. a | With the help of example explain Euclid's Algorithm  | 6M |
| b    | With the help of example explain Modular arithmetic theorem  | 6M |

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