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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year II Semester Regular Examinations October-2022

CRYPTOGRAPHY & DATA SECURITY

CSE (Internet of Things and Cyber Security Including Block Chain Technology)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Explain in detail different passive and active attacks. L2 6M
b Elaborate the properties of Security Mechanisms. L3 6M

OR

- 2 a What is meant by denial of services (DOS), Spoofing and Phishing? Explain. L2 6M
b Write short note on linear and differential cryptanalysis. L1 6M

UNIT-II

- 3 a Write short note on block cipher principles. L1 6M
b Describe Ceaser Cipher algorithm in substitution techniques. L1 6M

OR

- 4 a State and explain the principles of public key cryptography. L2 6M
b Explain Double & Triple DES with keys. L2 6M

UNIT-III

- 5 a Explain the RSA algorithm. Compute cipher text for $M=88$, $p=17$, $q=11$, $e=7$. L4 6M
b Give the structure of DSA. explain with algorithms. L2 6M

OR

- 6 a Give the structure of AES. explain with algorithms. L2 6M
b Explain the round transformation of IDEA. L1 6M

UNIT-IV

- 7 a What is security goals? Explain in details. L2 6M
b Explain in detail Hash Functions. L2 6M

OR

- 8 a What are the different types of viruses? How do they get into the systems? L1 6M
b Explain in detail man in middle attack. L2 6M

UNIT-V

- 9 a Explain in detail Digital Signature Standard approach and its algorithm. L2 6M
b Describe the steps in message digest generation in Secure Hash Algorithm in detail. L1 6M

OR

- 10 a Write a neat sketch explain the IPSec scenario and IPSec Services. L3 6M
b Discuss clearly Secure Hash Algorithm(SHA). L1 6M

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