C'' COMPUTOT Reg. No: SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY :: PUTTUR (AUTONOMOUS) **B.Tech IV Year I Semester Regular & Supplementary Examinations Feb-2021** INFORMATION SECURITY (Computer Science & Information Technology) Max. Marks: 60 Time: 3 hours (Answer all Five Units $5 \times 12 = 60$ Marks) **UNIT-I 6M** a Describe in detail about Conventional Encryption Model. 1 b Determine the security mechanisms required to provide various types of security **6M** services. OR **6M** a What is symmetric key cryptography? Discuss its advantages and limitations? 2 b Discuss in detail about various types of Security attacks with neat diagrams. **6M UNIT-II** 7Ma Determine the GCD(24140,16762) using Euclid's algorithm 3 **5M** b Compare conventional encryption with public key encryption OR 12M Explain RSA algorithm with suitable examples. 4 **UNIT-III** a Compare different types of SHA algorithms with parameters **6M** 5 b Discuss about the objectives of HMAC and its security features. **6M** OR 12M Deign RSA-PSS Digital Signature Algorithm 6 **UNIT-IV** a Enumerate the differences between Kerberos Version 4 and 5 **6M** 7 b Explain the authentication procedures defined by X.509 certificate **6M** OR What is secret key distribution? Explain secret key distribution with confidentiality 8 and authentication. 12M UNIT-V With a neat sketch explain the IPSec scenario and IPSec Services. 12M 9 OR 10 a What are the different types of viruses? How do they get into the systems? **6M b** Explain Intrusion detection in detail **6M**

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