

Code No.: CY514PE & IT511PE

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III-B.TECH-I-Semester End Examinations (Supply) - June- 2024
CRYPTOGRAPHY & NETWORK SECURITY
(CSC, IT)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks.

PART-A

(20 Marks)

1. a) What are passive attacks? List the types of passive attacks. [2M]
- b) Define Symmetric and Asymmetric Cryptography. [2M]
- c) What are the differences between public-key and private-key encryption? [2M]
- d) Explain the avalanche effect. [2M]
- e) List out Services of X.509 Authentication. [2M]
- f) Define digital signature. Explain its role in network security. [2M]
- g) List notations used in HTTPS. [2M]
- h) Differentiate IEEE 802.11 & 802.11i. [2M]
- i) Why is segmentation and reassembly function in PGP needed? [2M]
- j) What is the use of Cross Site Scripting? [2M]

PART-B

(50 Marks)

2. Discuss about different types of security services. [10M]
OR
3. Outline in detail about active and passive attacks. [10M]
4. Explain about AES with a neat diagram. [10M]
OR
5. How RSA algorithm working? Give with an example. [10M]
6. Explain about Secure Hash Algorithm (SHA-512). [10M]
OR
7. What are the four requirements were defined for Kerberos? What entities constitute a full-service Kerberos environment? [10M]
8. Describe the steps are involved in the SSL Record Protocol transmission? [10M]
OR
9. Summarize different Wireless Network Security standards and their functionalities. [10M]
10. Explain about Pretty Good Privacy. How does PGP use the concept of trust? [10M]
OR
11. Discuss about Secure Multi Party Calculation, Secure Single Sign ON. [10M]
