

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS

III-B.TECH-II-Semester End Examinations (Supply) - December- 2025
CRYPTOGRAPHY AND NETWORK SECURITY
(CSD)

[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 and may have a, b, c as sub questions.

PART-A**(20 Marks)**

1. a) Define Cryptography. [2M]
- b) Define Information Security. [2M]
- c) What are public key cryptosystem algorithms? [2M]
- d) Determine session key and master key. [2M]
- e) Define digital signature. [2M]
- f) What are the advantages and disadvantages of Kerberos? [2M]
- g) Define TLS. [2M]
- h) Write about web security considerations? [2M]
- i) What is cookie? [2M]
- j) What are authentication and confidentiality? [2M]

PART-B**(50 Marks)**

2. Write the types of security attacks with an example. [10M]
- OR**
3. Distinguish between symmetric key and asymmetric key cryptography. [10M]
4. Write in detail about simple-DES. [10M]
- OR**
5. Explain about Blowfish Algorithm with an example. [10M]
6. What are the different kinds of the authentication requirements are there for message authentication? Explain. [10M]
- OR**
7. Write in detail about Digital Signature. [10M]
8. Explain about secure shell. [10M]
- OR**
9. Write about the Wireless LAN standards. [10M]
10. Draw a neat diagram and write about IP Security Architecture. [10M]
- OR**
11. Justify why S/MIME is a security enhancement to MIME internet email format Standard? [10M]
