

**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]
<b>OR</b>	
3. Distinguish between symmetric key and asymmetric key cryptography.	[10M]
4. Write in detail about simple-DES.	[10M]
<b>OR</b>	
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]
<b>OR</b>	
7. Write in detail about Digital Signature.	[10M]
8. Explain about secure shell.	[10M]
<b>OR</b>	
9. Write about the Wireless LAN standards.	[10M]
10. Draw a neat diagram and write about IP Security Architecture.	[10M]
<b>OR</b>	
11. Justify why S/MIME is a security enhancement to MIME internet email format Standard?	[10M]

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