

R16

Code No: 136AW

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, February - 2023

CRYPTOGRAPHY AND NETWORK SECURITY

(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

- | | | |
|------|--|-----|
| 1.a) | What is Authentication? | [2] |
| b) | What is cipher text? | [3] |
| c) | What is message authentication code? | [2] |
| d) | What elements of HTTPS are encrypted? | [3] |
| e) | What protocols comprise SSL? | [2] |
| f) | What are the principal services provided by PGP? | [3] |
| g) | What is DKIM? | [2] |
| h) | What are the different classes of Intruders? | [3] |
| i) | What is Honey pots? | [2] |
| j) | What is kerberos realm? | [3] |

PART – B

(50 Marks)

2. List and briefly explain categories of security services and security mechanisms. [10]

OR

3. Explain steganography and explain different possible types of attacks. [10]

4. Explain Diffie – Hellman key exchange. [10]

OR

5. Explain RSA public key encryption algorithm. [10]

6. Explain X.509 certificates. Give its format. [10]

OR

- 7.a) Explain digital signatures. [5]

- b) Explain secure hash algorithm. [5]

QA QA QA QA QA QA QA Q

8.a) Explain Transport layer security.

b) Briefly define SSH protocols.

[5+5]

QA QA QA QA OR QA QA QA Q

9.a) Explain about IEEE 802.11 wireless LAN.

b) Explain wireless security.

[5+5]

10.a) Explain S/MIME.

b) Explain Internet key exchange.

[5+5]

QA QA QA QA OR QA QA QA Q

11.a) Give IP security architecture.

b) Explain anti-replay service in ESP.

[5+5]

---ooOoo---

QA QA QA QA QA QA QA Q

QA QA QA QA QA QA QA Q

QA QA QA QA QA QA QA Q

QA QA QA QA QA QA QA Q

QA QA QA QA QA QA QA Q