

Misc. Comp. Sci Part - I (Sem - II) 25. 25 d 13/01/2025

(2^{1/2} Hours.)

[Total Marks: 75]

N. B.: (1) All questions are compulsory.

(2) Numbers to the right indicate marks.

(3) Make suitable assumptions wherever necessary and state the assumptions made.

(4) Answers to the same question must be written together.

(5) Mixing of Sub-Questions is not allowed.

(6) Draw neat labelled diagrams wherever necessary.

1. Attempt any three of the following:

15

- What do you mean by Access Control List (ACL)?
- Differentiate between active and passive attacks.
- Write about DoS and DDoS Attacks.
- Describe the concept of Segmentation.
- Write about Reliability of Database and Sensitive data.
- Discuss the concept of Base/Bound Registers.

2. Attempt any three of the following:

15

- Explain any two types of network layer attacks.
- What are Firewalls? Explain its need and significance.
- Write in brief about Alerts and Audit Trails.
- Define IDS. Explain its types.
- Discuss the need & use of Intrusion Prevention Systems.
- Write a short note on Secure Socket Layer (SSL).

3. Attempt any three of the following:

15

- What are the different techniques used for user Authentication?
- Discuss various security issues of virtualization system.
- Explain ESX vs. ESXi: Key Differences.
- Write in brief about Network-attached storage.
- What is Software-as-a-Service (SaaS)? State its advantages & disadvantages.
- Explain data security and storage in cloud. Discuss best practices for data security.

4. Attempt any three of the following:

15

- State the characteristics of cellular systems.
- Write in brief about attacking 802.11 networks.
- Describe in detail Bluetooth reconnaissance.
- What are Wireless networks? Explain its types.
- Explain in detail Zig Bee Attacks.
- State the Comparative analysis of Wi-Fi and 802.11.

5. Attempt any three of the following:

15

- Write in brief about Secure Electronic Transaction (SET).
- What are Different types of security?
- State the Proposals for multilevel database security.
- Write a short note on Public key Infrastructure (PKI).
- What is Kerberos? State its role & significance.
- What do you mean by Open-Source Bluetooth Sniffing?