T.Y. BSCIT CBCS - VI   dt - 18/02/2025

(2½ hours)   [Total Marks: 75]

N.B.   1) All questions are compulsory.
        2) Figure to the right indicate marks.
        3) Draw neat diagrams wherever necessary.
        4) Mixing of sub-questions is not allowed.

1. Attempt **any three** of the following: 15
   a) What are the three D's of security?
   b) Write about impossible jobs and weakest link in security.
   c) What are the threat vectors?
   d) Write a short note on Zone of Trust.
   e) Explain the types of viruses.
   f) Explain any two types of Application-layer attacks.

2 Attempt **any three** of the following: 15
   a) Explain Secure Sockets Layer (SSL) Authentication in detail.
   b) What is Authorization? Explain Role-Based Authorization.
   c) Demonstrate Public-Key Cryptography Model.
   d) Describe Public Key Infrastructure in detail.
   e) What are the different types of availability risk?
   f) Write a short note on Database Backup and recovery.

3. Attempt **any three** of the following: 15
   a) Describe Cisco Hierarchical Internetworking model.
   b) What do you mean by Port Address Translation?
   c) Write a short note on Network Device Security
   d) Explain Radio Frequency Security.
   e) Write in brief about wireless vulnerabilities and mitigations.
   f) Write a short note on Firewall.

4. Attempt **any three** of the following: 15
   a) Describe the working of Network-Based IDS.
   b) Write in Brief about Telecom Expense Management.
   c) Explain the Bell-LaPadula and Biba model of security.
   d) Write a short note on Voice Over IP.
   e) What is the role and functionality of PBX?
   f) Describe a firewall with its types.

5. Attempt **any three** of the following: 15
   a) What is cloud computing? Explain the types of cloud services.
   b) Explain Confidentiality & Integrity risks associated with cloud computing.
   c) Write a short note on Remote Administration Security.
   d) How is the guest OS protected in a Virtual environment?
   e) Describe various methods in Web application security.
   f) What factors must be considered while selecting a site location for security?

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