

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)  
Chromepet, Chennai - 600 044.

B.C.A - END SEMESTER EXAMINATIONS - APRIL 2025  
SEMESTER - VI

**24UCAET6A02 - Security in Information Technology**

Total Duration : 1 Hrs.30 Mins.

Total Marks : 40

### **Section B**

Answer any **TEN** questions (10 × 2 = 20 Marks)

1. Define Mail Bombing.
2. What is meant by Timing attacks?
3. What is the primary function of a firewall in network security?
4. What is the purpose of a honeynet in cybersecurity?
5. What is hybrid cryptography?
6. What are the fundamental principles of cryptography?
7. Define Steganography.
8. Define Hashing.
9. What is a VPN?
10. Define Digital Forensics.
11. What are the key components of an Information Security Maintenance Model?
12. Name any two security management models.

### **Section C**

Answer any **FOUR** questions (4 × 5 = 20 Marks)

13. Classify Vulnerabilities tools and techniques.
14. Explain what anti-malware software is and describe its role in network and system security. Discuss the different types of malware that anti-malware software protects against, and explain how it works to detect and remove malware.
15. Explain what a firewall is and describe its various types.
16. Explain what a Denial of Service (DoS) attack is, describing its types and the potential consequences for businesses.
17. Discuss briefly about Symmetric and Asymmetric encryption algorithm.
18. What is technology obsolescence? Discuss the different types of risks associated with technology obsolescence and explain strategies for minimizing these risks.

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