

**PRACTICE SET**  
**End Semester Examination, December, 2025**

**Program: BBA**  
**Semester: III**  
**Subject: Cyber Security**  
**Subject Code: 11MDC201**

<b>Course Outcomes</b>	<b>Description</b>
CO1	Know about basic concepts of cyber security
CO2	Awareness about susceptibility for data while using digital platforms.
CO3	Understanding of different types of security threats
CO4	Awareness about executed Indian Laws for cyber security and role of cyber law for Intellectual Property Rights.

**Section A**

**(No. of Question 24x 5= 120 Marks)**

1. Define the term Cyber Security and state its main objectives.  
[CO1, Unit 1, BTL-LOT , Remember]
2. What is cybercrime? Explain four effective ways to prevent it.  
[CO1, Unit 1, BTL –LOT, Remember]
3. Explain the terms malware and ransomware with suitable examples.  
[CO1, Unit 1, BTL -LOT Understand]
4. Define Indian Cyberspace and discuss its importance in national security.  
[CO1, Unit 1, BTL -LOT Understand]
5. Describe the major challenges faced in ensuring information security in today's digital world.  
[CO2, Unit 1, BTL -LOT Apply]
6. Discuss different malicious or harmful online activities that can threaten users in cyberspace.  
[CO3, Unit 1, BTL –LOT, Understand]

7. Differentiate between active and passive attacks with suitable examples.  
[CO2, Unit 2, BTL –LOT, Understand]
8. Identify common vulnerabilities that hackers exploit and explain their possible impacts.  
[CO2, Unit 2, BTL –LOT, Understand]
9. Explain the concept of a Virtual Private Network (VPN) and illustrate how it protects online communication.  
[CO2, Unit 2, BTL –LOT, Understand]
10. Discuss the importance of proper data disposal and why it is vital for digital security.  
[CO2, Unit 2, BTL –LOT, Understand]
11. Outline the importance of data archival and suggest suitable storage options for long-term preservation.  
[CO2, Unit 2, BTL –LOT, Apply]
12. Demonstrate how phishing attacks can be identified and prevented through email security measures.  
[CO2, Unit 2, BTL –LOT, Apply]
13. Define a computer worm and list its distinguishing features.  
[CO3, Unit 3, BTL –LOT, Remember]
14. Explain what email viruses are and describe techniques to safeguard against them.  
[CO3, Unit 3, BTL –LOT, Understand]
15. Describe the purpose and advantages of using a firewall in network security.  
[CO3, Unit 3, BTL –LOT, Understand]
16. Compare and contrast virus vs. worms and malware vs. Trojan Horse with examples.  
[CO3, Unit 3, BTL –LOT, Understand]
17. Explain how phishing works and describe its impact on data privacy.  
[CO3, Unit 3, BTL –LOT, Understand]
18. Define spoofing and recommend effective ways to protect against it.  
[CO3, Unit 3, BTL –LOT, Apply]
19. Illustrate three key principles of e-commerce security that help ensure safe transactions.  
[CO3, Unit 3, BTL –LOT, Apply]
20. Explain what a Proxy Server is and demonstrate how it enhances online security.  
[CO3, Unit 3, BTL –LOT, Apply]
21. Explain the need and importance of a Cyber Security Policy for organizations.  
[CO4, Unit 4, BTL –LOT, Understand]
22. Define a Patent and discuss the criteria of patentability under intellectual property rights.  
[CO4, Unit 4, BTL –LOT, Understand]

23. Describe the Patent Cooperation Treaty (PCT) and its role in international patent protection. [CO4, Unit 4, BTL –LOT, Understand]
24. Interpret the purpose and significance of Section 10A of the Information Technology Act, 2000. [CO4, Unit 4, BTL –LOT, Understand]

**Section B (No. of Question 12x 10= 120 Marks)**

25. Demonstrate the CIA Triad with a neat and well-labeled diagram, and explain its significance in Cyber Security. [CO1, Unit 1, BTL –LOT, Apply]
26. Who are cyber-criminals? Explain the three major categories of cyber-criminals with examples. [CO3, Unit 1, BTL –LOT, Understand]
27. Appraise the concept of Information Security and justify its importance in everyday life. [CO2, Unit 1, BTL –LOT, Evaluate]
28. Summarize five basic steps that help in ensuring the safety and confidentiality of database information. [CO2, Unit 2, BTL –LOT, Understand]
29. Explain in detail the recent advancements in Access Control mechanisms used for data protection. [CO2, Unit 2, BTL –LOT, Understand]
30. Describe the limitations of Intrusion Detection Systems (IDS) in maintaining information security. [CO2, Unit 2, BTL –LOT, Understand]
31. Explain the concept of E-Cash in Cyber Security and discuss the major issues associated with electronic cash systems. [CO2, Unit 3, BTL –LOT, Understand]
32. Examine the risks involved in electronic payment systems and analyze the major security challenges associated with them. [CO2, Unit 3, BTL –LOT, Analyze]
33. List various Computer Forensics services and explain any two of them in detail. [CO3, Unit 4, BTL –LOT, Understand]
34. Explain the Comprehensive Cyber Security Policy of India and discuss its key features. [CO4, Unit 4, BTL-LOT, Understand]
35. How does Section 4 of the Information Technology Act, 2000 provide legal recognition to electronic records? [CO4, Unit 4, BTL HOT, Create]
36. What are information security standards? Identify and justify which ISO standard is most commonly referred to for information security compliance. [CO4, Unit 4, BTL HOT, Create]

**Section C (No. of Question 6x 20= 120 Marks)**

37. Develop a detailed awareness campaign or poster for cybercafé users highlighting six key safety and security measures for protecting their data and privacy  
[CO1, Unit 1, BTL - HOT, Create]

38. (i) Design a flowchart or model showing how a network can detect and respond to a DoS attack  
(ii) Develop a network configuration plan that minimizes vulnerabilities exploited in DoS attacks.

[CO1, Unit 2, BTL HOT, Create]

39. (i) Examine how various types of Electronic Payment Systems differ in their structure, process, and security mechanisms  
(ii) Examine the key components of India’s electronic payment security framework and their role in ensuring transaction safety [CO3, Unit 2, BTL HOT, Analyze]

40. Evaluate the importance of distributing a Cyber Security Policy to employees and third parties, and justify effective distribution mechanisms used by organizations.  
[CO4, Unit 3, BTL HOT, Evaluate]

41. Examine the need for Intellectual Property (IP) laws in a developing country like India.  
OR  
Explain the scope and significance of effective implementation of Intellectual Property Rights (IPR) in India. [CO4, Unit 3, BTL HOT, Analyze]

42. Analyze the key characteristics of Intellectual Property (IP) and explain the various forms of Intellectual Property Rights (IPR) with relevant examples.

[CO4, Unit 4, BTL HOT, Analyze]

**Summary Sheet:**

**CO Wise**

CO	Q. No	Marks
CO1	1,2,3,4, 25, 37,38	70
CO2	5,7,8,9,10,11,12,27,28,29,30,31,32	95
CO3	6,13,14,15,16,17,18,19,20,26,33,39	85
CO4	21,22,23,24,34,35,36,40,41,42	110
<b>Total</b>		<b>360</b>

**Unit Wise**

<b>Unit</b>	<b>Q. No</b>	<b>Marks</b>
Unit 1	1, 2, 3, 4, 5, 6, 25, 26, 27, 37	80
Unit 2	7, 8, 9, 10, 11, 12, 28, 29, 30, 38, 39	100
Unit 3	13,14,15,16,17,18,19,20, 31, 32, 40, 41	100
Unit 4	21, 22, 23, 24, 33, 34, 35, 36 42	80
<b>Total</b>		<b>360</b>

**Blooms Taxonomy Level (BTL) Wise**

<b>BTL</b>	<b>Q. No</b>	<b>Marks</b>
LOT	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34	220
HOT	35, 36, 37, 38, 39, 40, 41, 42	140
<b>Total</b>		<b>360</b>

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**Disclaimer:** - This is a Practice Set. The Question in End term examination will differ from the Practice set. This Practice set is meant for practice only.