

5. (a) Describe security policy and its importance for an organization. Explain any three characteristics of a good security policy. (6)
- (b) Describe any four digital India initiatives by the government of India. (4)
6. (a) Explain the Intrusion Detection System. Describe the various types of IDS. (6)
- (b) Explain the concept of digital signature and digital certificate. (4)
7. (a) What do you mean by password crackers? (5)
- (b) What are computer criminals? Describe cyber crime in detail. (5)
8. Differentiate between : (10)
- (i) Virus and Trojan horse
- (ii) Law and ethics
- (iii) Fault and failure
- (iv) Hacker and cracker
- (v) Computer crime and digital crime

(200)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 6141

E

Unique Paper Code : 32345402

Name of the Paper : Information Security and Cyber Laws

Name of the Course : **Computer Science : Generic Elective for Honours**

Semester : IV

Duration : 3 Hours

Maximum Marks : 75

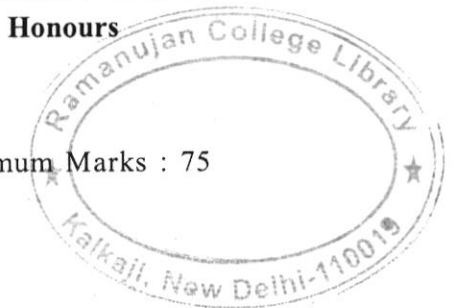
**Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. **All** questions are compulsory from **Section A**.
3. Please attempt any **four** questions from **Section B**.
4. Part of a question must be answered together.

**Section-A**

1. (a) Briefly describe the term authentication. (2)

P.T.O.



- (b) What is the punishment for dishonestly receiving stolen computer resource or communication device under ITAA 2008? (2)
- (c) Describe the need of information security. (2)
- (d) Briefly explain the term cyber forensic. (2)
- (e) Write a short note on email security. (2)
- (f) Explain three security goals of a computer system. (3)
- (g) What are the role and responsibility of cryptanalyst? (3)
- (h) What is firewall? Explain what a firewall can and cannot do. (3)
- (i) Differentiate symmetric key cryptography and asymmetric key cryptography with suitable examples. (3)
- (j) Describe various categories of attacks with suitable examples. (3)
- (k) Explain any three common security threats for operating system. (3)
- (l) Describe the password selection criteria to select a strong password. (3)

- (m) Briefly explain birthday attack and SQL injection attack. (4)

### Section-B

2. (a) Explain various access control mechanisms in a computing system. (4)
- (b) Encrypt the message "COME TO COMPUTER LAB AFTER CLASS" using Caesar cipher and rail fence cipher with key = 3. (6)
3. (a) Explain risk analysis. Describe the strategies to deal with the risk. (4)
- (b) Briefly describe the following attacks with suitable examples :
- (i) Denial of service attacks
- (ii) Phishing
- (iii) Malware attacks (6)
4. (a) Explain the CIA triad and its relevance to computer security. (5)
- (b) Explain the section 66F and section 72 of ITAA 2008. What are the punishments and penalties for the same? (5)