

This question paper contains 3 printed pages]

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S. No. of Question Paper : 6092

Unique Paper Code : 234603

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Name of the Paper : Information Security (CSHT-615)

Name of the Course : B.Sc. (H) Computer Science

Semester : VI

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt all questions from Section A.

Attempt any Four questions from Section B

Section A

1. (a) Discuss various types of threats. 5
- (b) What is transposition cipher ? Explain with an example. 5
- (c) Describe how the viruses are attached with the programs ? 5
- (d) What are the different ways in which operating system can support separation and sharing ?
Explain. 5

P.T.O.

- (e) List out the security requirements of a database. 5
- (f) What is a firewall ? Explain various types of firewalls. 5
- (g) Describe security planning. 5

Section B

2. (a) Discuss various aspects to be considered in computer security. 6
- (b) List different types of vulnerabilities ? Explain software vulnerability. 4
3. (a) What do you mean by one time pads ? Explain Vernam cipher with an example. 6
- (b) Define the following : 4
- (i) Cryptography
- (ii) Cryptanalysis
- (iii) Symmetric and Asymmetric encryption
4. Write short notes on the following : 5+5
- (i) Buffer overflow error
- (ii) Boot sector virus

5. (a) How to achieve memory and address protection using base/bound register method ? 5
- (b) What are the various ways for the control of access of general objects ? Explain directory method in detail. 5
6. How to handle the problem of failure of computing system in middle of modifying data ? Also give an example. 10
7. (a) Describe the different categories of Attacks on Networks ? 5
- (b) Describe the terms copyright, piracy and patents. Also distinguish between patents and copyrights. 5