

TED (15) 5136  
(Revision-2015)

**A20-00955**

Reg.No.....  
Signature.....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, APRIL-2020

**INFORMATION SECURITY**

[Maximum marks: 75]

(Time: 2.15 Hours)

**PART – A**

(Answer any *three* questions in one or two sentences. Each question carries 2 marks)

- I. (1). List the 2 types of integrity.  
(2). State the purpose of salt in a password scheme.  
(3). Define a worm.  
(4). Describe source address spoofing.  
(5). Explain the use of firewall. (3 x 2 = 6)

**PART – B**

(Answer any *four* of the following questions. Each question carries 6 marks)

- II. (1). Explain the concepts of confidentiality, integrity and availability.  
(2). Explain symmetric encryption with block diagram.  
(3). Discuss the use of hashed passwords.  
(4). Explain any two tokens in token based authentication.  
(5). Explain the function of honey pots.  
(6). Discuss any two malicious software.  
(7). Briefly explain any two flooding attack. (4 x 6= 24)

**PART – C**

(Answer *any of the three units* from the following. Each question carries 15 marks)

**UNIT –I**

- III. List the security services under the security architecture of the OSI model X. 800 (15)

**OR**

- IV. (a). Explain the Public Key Encryption structure. (12)  
(b). Explain the concept of digital signatures. (3)

## UNIT-II

- V. (a). List the physical characteristics of biometric authentication. (7)  
(b). Explain the concepts of subject, object and access rights. (8)

**OR**

- VI. (a). Briefly explain the password selection strategies. (8)  
(b). Explain the various access control policies. (7)

## UNIT-III

VII. Briefly explain:

- (a). Host based Intrusion Detection. (10)  
(b). Network based Intrusion Detection. (5)

**OR**

- VIII.(a). Explain the different classifications of Virus. (8)  
(b). Mention the uses of Bots. (7)

## UNIT-IV

- IX. (a). Describe distributed denial of service attack. (8)  
(b). Describe Amplifier attack. (7)

**OR**

X. Write short notes on:

- (i). Packet Filtering Firewall. (ii). Stateful Inspection Firewall.  
(iii). Circuit level gateway.

(5 x 3 = 15)