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(Revision-2015)

A22 - 08231

Reg.No.....

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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL-2022

INFORMATION SECURITY

[Maximum marks: 100] (Time: 3 Hours)

PART – A

Maximum marks : 10

I (Answer ***all*** the questions in one or two sentences. Each question carries 2 marks)

1. Define authenticity.
2. List the aspects of computer security strategy.
3. Define Masquerader.
4. Define firewall.
5. What is interception? (5 x 2 = 10)

PART – B

Maximum marks : 30

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

1. Explain computer security triad.
2. Explain the various basic elements of Access control.
3. Explain Intrusion Detection Exchange Format.
4. Describe Bastion Hosts.
5. Explain Token based authentication.
6. Explain the requirements of IDS.
7. Explain Types of Flooding Attacks. (5 x 6= 30)

PART – C

Maximum marks : 60

(Answer one full question from each unit. Each full question carries 15 marks)

UNIT –I

III.(a) Explain public key encryption with block diagram. (8)

(b) Explain the Scope of Computer and Network Security with block diagram. (7)

OR

IV.(a) Explain simplified model of symmetric encryption with block diagram. (8)

(b) List security functional requirements. (7)

UNIT-II

V. (a) Explain Biometric Authentication. (8)

(b) Explain Password attack strategies. . (7)

OR

VI. (a) Explain various access control policies. (8)

(b) Explain the use of hashed passwords. (7)

UNIT-III

VII.(a) Describe Distributed Host-Based IDS. (8)

(b) Explain Virus structure. (7)

OR

VIII.(a) Describe Worms and requirements for Worm countermeasures. (8)

(b) Explain the functioning of SNORT IDS – Architecture and rules. (7)

UNIT-IV

IX. (a) Explain Distributed Denial of Service Attacks. (8)

(b) Explain Distributed Firewalls. (7)

OR

X. (a) Explain Packet Filtering Firewall and Stateful Inspection Firewall. (8)

(b) Describe Amplification Attacks. (7)

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