TED (15) — 5136

(REVISION — 2015)

Reg. No. ....

Signature ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

INFORMATION SECURITY

[*Time* : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

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

1. Define the term Integrity.

2. What is digital signature.

3. Define User Authentication.

4. List any four classes of intruders.

5. Define firewall.

$(5 \times 2 = 10)$

PART — B

(Maximum marks : 30)

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

1. Describe implementation step computer security strategy.

2. Illustrate the password attack strategies.

3. Explain the physical characteristics used in biometric authentication.

4. Describe honey pots.

5. Explain any four characteristics of root kit.

6. Discuss about source address spoofing.

7. Discuss about bastion host.

$(5 \times 6 = 30)$

[243]

[P.T.O.

Marks

PART — C

(Maximum marks : 60)

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

UNIT — I

III (a) Describe computer security triad.   6

(b) Explain in detail about communication line and network attack.   9

OR

IV (a) Illustrate how the public key certificate is used in authentication.   7

(b) Describe stream cipher and block cipher.   8

UNIT — II

V (a) Explain in detail about password selection strategies.   8

(b) Explain the various security issues of user authentication.   7

OR

VI (a) Discuss access control policies.   6

(b) Discuss Unix file access control.   9

UNIT — III

VII (a) Discuss the classification and requirement of intrusion detection system.   9

(b) Illustrate SNORT architecture.   6

OR

VIII (a) What is virus and explain the nature of virus ?   9

(b) Describe about worm counter measures.   6

UNIT — IV

IX (a) Discuss flooding attacks.   9

(b) Write a note on synchronous spoofing.   6

OR

X (a) Explain packet filtering firewall.   8

(b) Explain distributed firewalls.   7

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