TED (15) –5136
(Revision – 2015)

**A23 - 08113**

Reg.No……..
Signature……...

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE , APRIL – 2023**

**INFORMATION SECURITY**

(Maximum Marks : 100) (Time : 3 hours)

**PART – A**
(Maximum Marks : 10)

Marks

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

1. What is symmetric encryption?
2. Name any four physical characteristics used in biometric authentication.
3. Define access control.
4. What is meant by anomaly detection?
5. Define Denial of service.

(5x2=10)

**PART – B**
(Maximum Marks : 30)

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

1. Explain the security requirements triad.
2. With the help of a diagram, explain message authentication code.
3. Describe biometric accuracy.
4. Explain about access control policies.
5. Discuss about snort architecture.
6. What is bots? Explain it's uses.
7. Discuss about bastion host.

(5x6=30)

## PART – C

(Maximum Marks : 60)

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

### UNIT – I

**III.** (a) Explain in detail security concepts and relationships. (9)

(b) Discuss three aspects of computer security strategy. (6)

**OR**

**IV.** (a) Explain message authentication with one way hash function using figure. (9)

(b) Compare and contrast block and stream cipher encryption. (6)

### UNIT – II

**V.** (a) Briefly explain password attack strategies and it's counter measures. (9)

(b) Name any three tokens used in token based authentication. Explain them. (6)

**OR**

**VI.** (a) Explain relationship between access control and security functions. (9)

(b) Describe briefly about access control principles. (6)

### UNIT –III

**VII.** (a) Explain distributed host based intrusion detection with the help of a diagram. (15)

**OR**

**VIII.** (a) Explain various antivirus techniques in detail. (9)

(b) Name any three malicious softwares and define them. (6)

### UNIT – IV

**IX.** (a) Discuss briefly reflector and amplifier attacks. (10)

(b) What is source address spoofing? Explain briefly. (5)

**OR**

**X.** (a) Explain packet filtering and application level firewalls using diagram. (10)

(b) Give some of the advantages of firewall. (5)

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