00872

ADVANCED CERTIFICATE IN INFORMATION SECURITY (ACISE)

Term-End Examination

June, 2016

OSEI-041 : INFORMATION SECURITY

Time : 2 hours   *Maximum Marks : 50*

Note :   *(i)*   **Section A** - *Answer **all** the objective questions.*

(ii)   **Section B** - *Answer **all** the very short answer questions.*

(iii) **Section C** - *Answer **any two** questions out of three.*

(iv)   **Section D** - *Answer **any two** questions out of three.*

SECTION - A

Objective questions

(Attempt **all** the questions)

1.   A stateful firewall maintains a _____ ,   **1**
     which is a list of active connections.
     (a)   routing table
     (b)   bridging table
     (c)   state table
     (d)   connection table

2.   NTFS stands for _____.   **1**

3.   VOIP stands for _____.   **1**

4. A firewall needs to be _____ so that it can   1
   grow with the network it protects.
   (a) robust
   (b) expensive
   (c) fast
   (d) scalable

5. Accurate and complete data enters the system for   1
   processing and remains accurate thereafter, is said
   to have :
   (a) Integrity
   (b) Security
   (c) Viruses
   (d) Accidental deletion

6. Worms and viruses are programs that can cause   1
   destruction of data and software, but they differ
   on how they spread and function.
   (a) True
   (b) False

7. Inaccurate data entry, worms and viruses, fraud   1
   and hardware malfunction are ways which
   affects :
   (a) Data Security
   (b) Users
   (c) Software
   (d) Database

8. How are viruses spread ?   1
   (a) Through firewalls
   (b) downloading infected programs and files
       from internet
   (c) Garbled information
   (d) install anti-virus

9. _____ provides a connection-oriented **1**
reliable service for sending messages.

(a) TCP

(b) IP

(c) UDP

(d) All of the above

10. A firewall is a secure and trusted machine that **1**
sits between a private and public network.

(a) True

(b) False

SECTION - B

Very short questions

(Attempt all the questions)

11. Define physical security. **2**

12. What are the critical characteristics of **2**
information ?

13. What are the components of an information **2**
system ?

14. What is the difference between a threat agent and **2**
a threat ?

15. What is hacking ? **2**

SECTION - C

Short answer questions

(Attempt **2** out of **3** questions)

16. What are "computer worms" ? How they are   **5**
    different from "Computer Viruses" ?

17. What do you understand by cryptographic   **5**
    protocol ? Explain with the help of suitable
    examples.

18. Explain the role of security protocols.   **5**

SECTION - D

Long answer questions

(Attempt **2** out of **3** questions)

19. Discuss in detail, how a computer system can be   **10**
    attacked ? Also discuss the protection measures.

20. What is authentication mechanism ? Explain in   **10**
    detail.

21. What is an information security blueprint ?   **10**
    Indentify its major components and explain how
    it supports the information security program ?