

COMPUTER SECURITY

Full Marks - 70

Time : 3 Hours

*The figures in the right hand margin indicate full marks for the questions.*

*Answer question No. 1 which is compulsory and any five from the rest.*

IWL

1. Answer the following in a sentence or two :

2×10

(a) What is an "information broker" ?

(b) What is the difference between Symmetric & Asymmetric Encryption System ?

(c) What is the difference between a transient virus and a resident virus ?

P.T.O.

- (d) List any two types of firewalls.
- (e) In what condition, UNDO command is used for database.
- (f) What is the full form of RSA ?
- (g) What is the job of Page Translation Table in Paging ?
- (h) What is the use of Access Control Matrix ?
- (i) What is DHCP ? Why it is used ?
- (j) What is a Boot Sector Virus ?

2. What do you mean by public key encryption ? Discuss substitution ciphers using an example.

10

3. What are the basic elements of designing a trusted OS ? Discuss in brief.

10

4. What are the general security concerns? Discuss their special roles for a multilevel database. 10

5. What do you mean by Secure E-mail ? What are the different threats to e-Mail? Discuss one example of Secure E-mail. 10

6. Discuss different characteristics of a good security policy with suitable examples. 10

7. (a) Differentiate between legal and ethical issues related to computer security. 5

(b) Give two examples of issues which are not legally prosecutable but are unethical. 5

8. Write short notes on any two : 5×2

(a) DES vs AES

(b) Firewalls

(c) Targeted Malicious Code

(d) Differentiated Security.