

Total No. of Questions : 10]

SEAT No. :

P2348

[Total No. of Pages : 2

[5254]-681

B.E. (Information Technology) (Semester - I)
INFORMATION AND CYBER SECURITY
(2012 Pattern)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume suitable data if necessary.*

Q1) a) Explain Passive attacks and Active attacks in detail. **[6]**

b) State the Euclids algorithm with example. **[4]**

OR

Q2) a) Draw AES block diagram and state the general steps in detail. **[6]**

b) Distinguish between linear cryptanalysis and differential cryptanalysis. **[4]**

Q3) a) Enlist the requirement of hashfunction and explain working of MD5 algorithm In detail. **[6]**

b) What is Needham Schroeder protocol? Explain with sequence diagram. **[4]**

OR

Q4) a) Define Fermat's theorem with example. **[3]**

b) What is Kerberos? **[2]**

c) Explain Diffie- Hellman Key exchange algorithm with example. **[5]**

P.T.O.

- Q5)** a) Explain SSL hand shake and SSL Record protocol in detail with neat sketch. [8]
b) Explain different IDS methods with one example each. [8]

OR

- Q6)** a) Define IKE protocol and explain its aggressive mode and quick mode in brief. [8]
b) Describe briefly how IPSec works and enlist its applications? Distinguish between tunnel and transport mode of IPSec. [8]

- Q7)** a) Describe the Indian and global legal perspective on cyber-crime. [6]
b) Explain the types of cyber-crime in detail. [10]

OR

- Q8)** a) What is cyber stalking? Explain the types of stalkers. [10]
b) Address security issues in cloud computing. [6]

- Q9)** a) Write short note on. [12]
i) Indian IT Act 2000 and its challenges.
ii) SQL injection
b) Define and differentiate phishing and pharming? Describe key loggers and Spywares in brief. [6]

OR

Q10) Write short note on following

- a) Host based Malicious programs: Trap Door, Logic Bombs and Trojan Horse. [6]
b) Virus and Worm. [6]
c) Proxy server and an anonymizer. [6]

