

[5254]-180-A
B.E. (Computer)
INFORMATION SECURITY
(2008 Pattern) (Elective - IV)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Figures to the right indicate full marks.*

SECTION - A

Q1) a) What is confidentiality? Explain any one algorithm to implement confidentiality. [9]

b) Explain any one algorithm to implement classical cryptography. [9]

OR

Q2) a) Describe different policies of security in detail. [9]

b) What is information security? Discuss lifecycle of security in detail. [9]

Q3) a) Differentiate private and public key cryptography. [8]

b) What is IDEA? Explain idea in detail. [8]

OR

Q4) a) Explain DES algorithm & with suitable diagram in detail. [8]

b) Discuss different issues of cryptography. [8]

Q5) a) Explain ECC encryption algorithm in detail. [8]

b) Discuss different issues of generation of key. [8]

OR

Q6) a) What is DH? Explain DH. algorithm in short. [8]

b) Discuss uses of number theory in different algorithm for cryptography. [8]

SECTION - B

- Q7)** a) Define MAC. Discuss applications of MAC in information security. [9]
b) What is PKI? Explain PKI in detail. [9]

OR

- Q8)** a) What is HMAC? Explain algorithm of HMAC in detail. [9]
b) Define DSA. Explain DSA algorithm in detail. With suitable diagram. [9]

- Q9)** a) What is SSL? Discuss SSL with application. [8]
b) What is IPSEC? What are different applications of IPSEC. [8]

OR

- Q10)** a) Define TLS. Discuss TLS with applications. [8]
b) What is IDS? Enlist different types of IDS with explanation. [8]

- Q11)** a) Enlist and explain different security services. [8]
b) Define PGP. Describe PGP in detail. [8]

OR

- Q12)** Write a short notes on following (any four) [16]

- a) PGP
- b) PEM
- c) S/MIME
- d) Standards of information security.
- e) Information security architecture

