

# 314319

**12526**

**3 Hours / 70 Marks**

Seat No. 

--	--	--	--	--	--	--	--

- 
- Instructions* – (1) All Questions are *Compulsory*.
- (2) Answer each next main Question on a new page.
- (3) Illustrate your answers with neat sketches wherever necessary.
- (4) Figures to the right indicate full marks.
- (5) Assume suitable data, if necessary.
- (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
- (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

- 1. Attempt any FIVE of the following :** **10**
- a) Compare virus and logic Bomb (Any two points of each)
- b) Explain the term asset.
- c) List principles of access control.
- d) Define following terms :
- i) Cryptography
- ii) Cryptology
- e) Draw diagrammatic representation of DES algorithm.
- f) Define the term Honeypots.
- g) List types of cyber crime.

P.T.O.

- 2. Attempt any THREE of the following :** **12**
- a) Explain man in the middle attack with example.
  - b) Enlist types of Biometrics and explain any one in detail.
  - c) Convert plain text into cipher text by using simple columnar technique of the following sentence –  
“Maharashtra State Board of Technical Education”
  - d) Explain RSA algorithm with example.
- 3. Attempt any THREE of the following :** **12**
- a) Explain any four password policies.
  - b) Differentiate between symmetric and asymmetric cryptography.  
(Min. four points each)
  - c) Describe threats to mobile phones. Explain the prevention measures.
  - d) Describe SMTP in email security.
- 4. Attempt any THREE of the following :** **12**
- a) Explain criteria for information classification.
  - b) Explain the terms authorization and authentication with respect to security.
  - c) Describe the working encryption and decryption with example.
  - d) Describe digital signature.
  - e) Explain cyber law. List the need of cyber law.

- 5. Attempt any TWO of the following :** **12**
- a) Explain basic principles of information security with example.
  - b) Describe the steps and perform simple columnar transposition technique on the following with column size = 6 and read output with order of column as 4, 6, 1, 2, 5, 3. Input for the same is – “Come Home Tomorrow”.
  - c) State and explain three types of firewall configurations with a neat diagram.
- 6. Attempt any TWO of the following :** **12**
- a) Explain working of steganography. Write advantages and disadvantages.
  - b) Explain Diffie Hellman key exchange algorithm with example.
  - c) Describe the DMZ with suitable diagram.
-