

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**BHCI (2014 & Onwards) (Sem.-5)**

## INFORMATION SECURITY

**Subject Code : BMCI-505**

**Paper ID : [74107]**

**Time : 3 Hrs.**

**Max. Marks : 60**

### INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

**1) Answer briefly :**

- What are the components of an information system?
- Distinguish between policy and law.
- What is Intellectual Property? What is included in IP?
- Discuss PGP.
- What is meant by access control security?
- What is Steganography? How is it different from Cryptography?
- Encrypt the text “*CHANGE IN PLAN MEET ME AT DAWN*” using Caesar cipher.
- What is COBIT? What are its components?
- What is Data Encryption Standard?
- What is a Digital Signature? What is its use?

### SECTION-B

- 2) Briefly discuss the security classification of information.
- 3) Define a Threat. Discuss various types of threats in short.
- 4) Discuss Secure Sockets Layer protocol.
- 5) What is the significance of audit records in intrusion detection? What are the various fields of an audit record?
- 6) Discuss and differentiate between symmetric and asymmetric key cryptography.

### SECTION-C

- 7) What are the approaches used for information security? Explain in detail the Security Systems Development Life Cycle.
- 8) Define Firewall. What are its different types? Explain the working of a firewall in detail.
- 9) The values of public key and private key are  $(N, E) = (33, 3)$  and  $(N, D) = (33, 7)$ . Use RSA algorithm to encrypt the word "TECHNOLOGY" and also show how the word can be decrypted from its encrypted form.