Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

BMCI (2014 & Onwards)   (Sem.–5)

INFORMATION SECURITY

Subject Code : BMCI-505
M.Code : 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 :**

   a) Differentiate between active and passive attacks on network security.

   b) What is a Virus?

   c) What is IPR?

   d) Discuss PGP.

   e) How is database security provided?

   f) What is Steganography? How is it different from Cryptography?

   g) What is security assurance?

   h) What are international security standards?

   i) What is the difference between DES and AES?

   j) What is cipher? How are ciphers used in encryption?

SECTION-B

2.   Briefly discuss the security systems development life cycle.

3.   Discuss S/MIME for email security.

4.   What is the role of business ethics and best practices in security?

5.   What do you mean by Digital Signature? What are the properties and requirements of digital signatures?

6.   Discuss and differentiate between symmetric and asymmetric key cryptography.

SECTION-C

7.   What are security vulnerabilities? Explain the process of vulnerability identification and assessment for different threats faced by an information security system.

8.   What is a Firewall? Discuss the working of a firewall. Discuss any one type of firewall in detail.

9.   Elaborate the RSA algorithm and discuss its working with an example.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.