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P259

SEAT No. :

[Total No. of Pages : 2

**BE/INSEM/APR - 587**  
**B.E. (Computer) (Semester - II)**  
**410251: INFORMATION & CYBER SECURITY**  
**(2015 Pattern)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates :*

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6.*
- 2) *Figures to the right side indicate full marks.*
- 3) *Assume suitable data, if necessary.*

**Q1)** a) Define Cryptography, Encryption, Decryption, Plain text, Cipher text & Cryptanalyst. **[5]**

b) What are different security policies? Explain. **[5]**

OR

**Q2)** a) Explain Passive and Active attacks with examples. **[5]**

b) What is Cryptanalysis? Explain various Cryptanalysis technique. **[5]**

**Q3)** a) Write short note on Electronic code book. **[5]**

b) Use Playfair Cipher to encrypt the message "Weliveina world full of beauty". Use key 'ANOTHER'. **[5]**

OR

**Q4)** a) Explain DES Algorithm with diagram. **[5]**

b) Explain simple columnar techniques with multiple rounds. **[5]**

**PTO.**

**Q5)** a) What is HMAC? Discuss different objectives of HMAC. Explain HMAC in brief. [5]

b) Use RSA algorithm to encrypt plaintext "3" use following parameters  $p = 11$ ,  $q = 3$ ,  $e = 13$ . [5]

OR

**Q6)** a) Explain operation of MD5 Message digest algorithm. [5]

b) Explain Elliptic curve Cryptography in detail. [5]

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