

This question paper contains **2** printed pages]

**CD—21—2016**

**FACULTY OF COMPUTER STUDIES**

**B.Sc. (NT) (Fourth Semester) EXAMINATION**

**OCTOBER/NOVEMBER, 2016**

**NETWORK TECHNOLOGY**

Paper (NT-S4.7)

(Cyber Security)

**(Wednesday, 23-11-2016)**

**Time : 2.00 p.m. to 5.00 p.m.**

*Time—3 Hours*

*Maximum Marks—80*

*N.B. :— (i) All questions are compulsory.*

*(ii) Figure to the right indicate full marks.*

- |     |  |    |
|-----|--|----|
| 1.  | Attempt the folloiwng :                        | 20 |
| (a) | Explain Active attacks.                        |    |
| (b) | Explain Firewalls.                             |    |
| (c) | Explain Encryption and Decryption.             |    |
| (d) | Explain RC 5.                                  |    |
| 2.  | (a) Explain modern nature of attacks.          | 8  |
|     | (b) Explain modified version of Caesar cipher. | 7  |
|     | <i>Or</i>                                      |    |
|     | (c) Explain mono-alphabetic cipher in detail.  | 8  |
|     | (d) Explain secure socket layer.               | 7  |
| 3.  | (a) Explain DES in detail.                     | 8  |
|     | (b) Explain RSA algorithm in detail.           | 7  |
|     | <i>Or</i>                                      |    |
|     | (c) Explain Time Stamping Protocol in detail.  | 8  |
|     | (d) Explain RC 4 in detail.                    | 7  |

P.T.O.

4. (a) Explain algorithm modes in detail. 8
- (b) Explain Caesar cipher in detail. 7
- Or*
- (c) Explain Homophonic substitution cipher in detail. 8
- (d) Explain Vernam cipher in detail. 7
5. Write short notes on the following (any *three*) : 15
- (a) Passive attacks
- (b) Rail Fence Technique
- (c) Algorithm types
- (d) TLS
- (e) Steganography.