



**K22U 2254**

**Reg. No. :** .....

**Name :** .....

**V Semester B.C.A. Degree (CBCSS-OBE-Regular/Supplementary/  
Improvement) Examination, November 2022  
(2019 Admission Onwards)  
Core Course  
5B16BCA – E01 INFORMATION SECURITY**

**Time : 3 Hours**

**Max. Marks : 40**

**PART – A  
Short Answer**

**Answer all questions :**

**(6×1=6)**

1. What do you mean by confidentiality ?
2. What do you mean by substitution cipher ?
3. What do you mean by cryptanalysis ?
4. List out any two private key algorithms.
5. What are the principles of a public key cryptographic algorithm ?
6. What do you mean by message authentication ?

**PART – B  
Short Essay**

**Answer any 6 questions :**

**(6×2=12)**

7. List out the needs for information security.
8. What is a symmetric key ?
9. List out some weaknesses of DES algorithm.
10. What are the criteria that a cryptographic hash function must satisfy ?

**P.T.O.**





11. What do you mean by cryptanalysis system ?
12. What are the benefits of RSA digital signature ?
13. What is steganography ?
14. What are the features of Trojan horse ?

**PART – C**  
**Essay**

Answer **any 4** questions :

**(4×3=12)**

15. Briefly explain various principles of security.
16. What are various categories of traditional ciphers ?
17. Explain brute force attack.
18. Differentiate public key and private key cryptographic systems.
19. What do you mean by message digest ?
20. Explain Kirchhoff's principle of cryptography.

**PART – D**  
**Long Essay**

Answer **any 2** questions :

**(2×5=10)**

21. Describe various types of security attacks.
22. Explain DES algorithm in detail.
23. Describe RSA algorithm.
24. Compare various digital signature schemes.