



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 ?

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- 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 Kirchoff'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.
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