Reg. No.:					

Question Paper Code: 37204

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Seventh Semester

Computer Science and Engineering

01UCS704 - FUNDAMENTALS OF INFORMATION SECURITY

(Regulation 2013)

Duration: 1:45 hour Maximum: 50 Marks

PART A - $(10 \times 2 = 20 \text{ Marks})$

(Answer any ten of the following questions)

- 1. List the different security policies and types of access control.
- 2. What is Chinese wall model?
- 3. Explain how the avalanche effect is achieved in DES.
- 4. Define ECC.
- 5. What are the requirements for message authentication?
- 6. Distinguish between directed and arbitrated digital signature.
- 7. What is the difference between vulnerability and exposure?
- 8. What are computer viruses? What are the types of viruses?
- 9. List out the components of user policies.
- 10. What are the components of user's security policies?
- 11. What is a threat? List out the four broad classes of threats?
- 12. What is Chinese wall model?
- 13. What is public key certificate?

- 14. Define ECC.
- 15. What are the requirements for message authentication?

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

- 16. What is access control matrix? Explain about protection and state transition in access control. (10)
- 17. How AES is used for encryption/decryption? Explain with example. (10)
- 18. What are the properties of hashing function in cryptography. (10)
- 19. Explain about penetration analysis in detail with any two examples. (10)
- 20. Explain the use of cryptographic and network security techniques for an online shopping application. (10)