## M.Sc. DEGREE EXAMINATION,NOVEMBER 2019 II Year III Semester Cryptography and Network Security

# Time : 3 Hours

Max.marks:75

Section A  $(10 \times 2 = 20)$  Marks

#### Answer any **TEN** questions

- 1. What is integrity? What are its types?
- 2. State the main objectives of security?
- 3. Differentiate Plain and Cipher text.
- 4. What is PRNG?
- 5. State Euler's Theorem.
- 6. What is Primality Testing?
- 7. What is a Digital Signature?
- 8. Differentiate Public and Private Key.
- 9. What is Man-in-the -middle attack?
- 10. What is a Cryptographic hash function?
- 11. What is Cryptanalysis?
- 12. What is a Substitution Cipher?

Section B  $(5 \times 5 = 25)$  Marks

### Answer any **FIVE** questions

- 13. Discuss about the model of encryption.
- 14. Explain about DES.
- 15. Explain the Chinese Remainder Theorem.
- 16. Discuss the principles of Public Key Cryptography.
- 17. Discuss about Diffie-Hellman-Key Exchange.
- 18. Elaborate on MAC.
- 19. Explain about any one Substitution Technique.

### Section C $(3 \times 10 = 30)$ Marks

#### Answer any **THREE** questions

- 20. Discuss in detail about Transposition Technique.
- 21. Explain AES algorithm in detail.
- 22. Discuss about the Euclidian Algorithm.
- 23. Elaborate on the RSA Algorithm.
- 24. Explain Secure Hash Algorithm (SHA)

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