# 20IT32P2 - CRYPTOGRAPHY AND NETWORK SECURITY LABORATORY

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| Course Category: | Professional Core | Credits: | 1.5 |
| Course Type: | Practical | Lecture-Tutorial-Practical: | 0-0-3 |
| Prerequisite: | Knowledge in Computer Fundamentals and Basic Mathematical Fundamentals. | Sessional Evaluation:Univ. Exam Evaluation:Total Marks: | 4060100 |
| Objectives: | * To learn and practice the essentials of Encryption and Decryption Procedure of Cryptography.
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| Course Outcomes | Upon successful completion of the course, the students will be able to: |
| CO1 | Understand the basics of Encryption and Decryption Procedure of Cryptography. |
| Course Content | 1. Write a Program for Caesar Cipher in Substitution Techniques.
2. Write a Program for Playfair Cipher in Substitution Techniques.
3. Write a Program for Hill Cipher in Substitution Techniques.
4. Write a Program for One-Time pad in Substitution Techniques.
5. Write a Program for RSA.
6. Write a Program for S-DES Algorithm.
7. Write a Program for Diffie-Hellman Algorithm.
8. Write a Program for El Gamal Cryptosystem.
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| Text Books &ReferenceBooks | **TEXT BOOKS:**1. Cryptography and Network Security: Principles and Practice-William Stallings, 6th Edition, Prentice Hall

**REFERENCE BOOKS:**1. Network Security Essentials (Applications and Standards) by William Stallings, Pearson Education.
2. Fundamentals of Network Security, by Eric maiwald.
3. Principles of Information Security by Whitman, Thomson.
4. Network Security - The Complete Reference by Robert Bragg
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