# CS6701 CRYPTOGRAPHY AND NETWORK SECURITY

INTRODUCTION AND NUMBER THEORY
Unit I Overview



## **Unit Objectives**

- Understand OSI security architecture and classical encryption techniques
- Acquire fundamental knowledge on the concepts of finite field and number theory



#### **Unit Outcomes**

- At the end of this session, students will be able to
  - Analyze various cryptographic techniques
  - Implement classical cryptographic systems



### Course Outcomes Addressed

| Unit Outcomes      |                                   | Course Outcomes  |
|--------------------|-----------------------------------|--|
| UO1:<br>cryptograp | Analyze variou<br>phic techniques | <ul> <li>Compare various cryptographic techniques</li> </ul> |
| UÓZ:               | Implement classic                 |  |



#### References

- 1. William Stallings, Cryptography and Network Security, 6th Edition, Pearson Education, March 2013.
- 2. Charlie Kaufman, Radia Perlman and Mike Speciner, "Network Security", Prentice Hall of India, 2002.

