

ST.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
LESSON PLAN

NAME OF THE SUBJECT: **Cryptography and Network Security**

SECTION: **IV CSE-B&IV CSE-B**

NAME OF THE INSTRUCTOR: **Mr.D.NageshBabu**

S.No	Unit Number	Topics	No. Of Classes Required
1	1	Basic Principles Security Goals, Cryptographic Attacks, Services and Mechanisms, Mathematics of Cryptography	8
2	2	Symmetric Encryption Mathematics of Symmetric Key Cryptography, Introduction to Modern Symmetric Key Ciphers, Data Encryption Standard, Advanced Encryption Standard.	10
3	3	Asymmetric Encryption Mathematics of Asymmetric Key Cryptography, Asymmetric Key Cryptography	9
4	4	Data Integrity, Digital Signature Schemes & Key Management Message Integrity and Message Authentication, Cryptographic Hash Functions, DigitalSignature, Key Management.	10
5	5	Network Security-I Security at application layer: PGP and S/MIME, Security at the Transport Layer: SSL and TLS	7
6	6	Network Security-II Security at the Network Layer: IPSec, System Security	5

TOTAL NO. OF CLASSES REQUIRED:49

TEXT BOOKS:

- 1) Cryptography and Network Security, Behrouz A Forouzan, DebdeepMukhopadhyay, (3e) McGraw Hill.
- 2) Cryptography and Network Security, William Stallings, (6e) Pearson.
- 3) Everyday Cryptography, Keith M.Martin, Oxford.

REFERENCE BOOKS:

- 1) Network Security and Cryptography, Bernard Meneges, Cengage Learning.

FACULTY

HOD