BHAI GURDAS INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science and Engineering

LESSON PLAN

Subject Name: - Compiler Design

Subject Code: - BTCS 601-18

Year: -2023

Semester: - 6th

| Lecture | Unit | Date/Week | Торіс | Teaching | References |
|---------|------|-----------|--|------------|-------------|
| No. | 1 | | | Aids | |
| 1 | 1 | 5 Days | Introduction to Cryptography | Projector, | Text Book , |
| 2 | - | | Security Threats | chalk, | Notes |
| 3 | | | Active and Passive attacks | green | |
| 4 | | | Conventional Encryption Model | board, | |
| 5 | - | | CIA model | duster | |
| 6 | 2 | 5 Days | Modular Arithmetic | - | |
| 7 | - | | Euclidean and Extended Euclidean algorithm | - | |
| 8 | | | Euclidean and Extended Euclidean algorithm | - | |
| 9 | | | Prime numbers | - | |
| 10 | | | Fermat and Euler's Theorem | - | |
| 11 | 3 | 12 Days | Dimensions of Cryptography | _ | |
| 12 | | | Classical Cryptographic Techniques Block | | |
| | | | Ciphers | - | |
| 13 | | | Feistal Cipher Structure | _ | |
| 14 | | | Simplifies DES, DES, Double and Triple DES | | |
| 15 | | | Block Cipher design Principles | | |
| 16 | | | Modes of Operations Public-Key | | |
| | | | Cryptography | - | |
| 17 | | | Principles Of Public-Key Cryptography | _ | |
| 18 | | | , RSA Algorithm | _ | |
| 19 | | | Diffie-Hellman Key Exchange | _ | |
| 20 | | | Diffie-Hellman Key Exchange | | |
| 21 | | | Elgamal Algorithm | _ | |
| 22 | | | Elliptic Curve Cryptography | _ | |
| 23 | 4 | 6 Days | Introduction to Hash and MAC Algorithms | | |
| 24 | | | Authentication Requirement | | |
| 25 | | | Message Authentication Code | _ | |
| 26 | | | Hash Functions, Security Of Hash Functions | | |
| | | | And Macs, | 4 | |
| 27 | | | MD5 Message Digest Algorithm | | |
| 28 | | | Secure Hash Algorithm, Digital Signatures | | |
| 29 | 5 | 7 Days | Threats in networks | | |
| 30 | | | Network Security Controls – Architecture | | |

| 31 | Strong Authentication, Access Controls | |
|----|--|--|
| 32 | Wireless Security | |
| 33 | Traffic flow security | |
| 34 | Design and Types of Firewalls, Personal Firewalls | |
| 35 | IDS, Email Security – PGP, S/MIME | |