INSTITUTE OF COMPUTER TECHNOLOGY

B-TECH COMPUTER SCIENCE ENGINEERING 2025-26

SUBJECT: CRYPTOGRAPHY

NAME: Rahul Prajapati

ENRLL. NO: 23162171020

BRANCH: CYBER SECURITY

BATCH: 52

PRACTICAL_1

Aim: To understand the fundamentals of encryption and decryption by implementing a basic or standard encryption algorithm that takes a user-inputted password, converts it into ciphertext, and then decrypts it back to its original form, displaying both ciphertext and original text in the console.

Source_Code:

```
from cryptography.fernet import Fernet
import getpass
key = Fernet.generate_key()
cipher = Fernet(key)
password = getpass.getpass("Enter your password: ").encode()
encrypted = cipher.encrypt(password)
print(" Encrypted password:", encrypted)
decrypted = cipher.decrypt(encrypted)
print(" Decrypted password:", decrypted.decode())
```

OUTPUT:-