

**Lab Manual  
of  
Information Security**

**Subject Code: 3IT02**

**Academic Year 2025-26**

**Name of Student : Yash Dhankecha**  
**Student ID No : 23IT474**  
**Batch : D-10**  
**Lab Faculty Name :**

**BACHELOR OF ENGINEERING**  
*In*  
**INFORMATION TECHNOLOGY**



**BVM Engineering College**  
**(An Autonomous Institution)**  
**Vallabh Vidhyanagar-388120**



**BVM ENGINEERING COLLEGE**  
(An Autonomous Institution)  
**Information Technology Department**

**AY: 2025-26, Semester-5**

***CERTIFICATE***

This is to certify that Mr. / Ms. Yash Ketanbhai Dhankecha of Year/Sem 5<sup>th</sup> ID No 23IT474 has satisfactorily completed his/her term work in Month of December for the term ending in November- 2025. Number of practical certified     out of     in the subject of **3IT02:Information Security.**

**Date:**     /     / 2025

Signature of Teacher



**BVM ENGINEERING COLLEGE**  
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**AY: 2025-26, Semester-5**  
**INFORMATION SECURITY(3IT02)**

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**Name:** \_\_\_\_\_ **ID No.:** \_\_\_\_\_

Pr. No.	Title	Date	Sign
1.	Perform Encryption and Decryption using the following Substitution techniques:  a) Ceaser Cipher b) Monoalphabetic Cipher c) Playfair Cipher d) Polyalphabetic Cipher e) Hill Cipher f) Vigenere Cipher		
2.	Perform Encryption and Decryption using following Transposition techniques: a) Rail Fence b) Row & Column Transformation		
3.	To implement find primitive root of any prime number with checking given number is prime number or not.		
4.	To implement Extended Euclidean Algorithm.		
5.	Implement RSA Algorithm using HTML and JavaScript.		
6.	Implement the Diffie-Hellman Key Exchange algorithm for a given problem.		
7.	Implement the SIGNATURE SCHEME – Digital Signature Standard.		
8.	Demonstrate intrusion detection system (ids) using any tool eg. Snort or any other s/w.		
9.	Automated Attack and Penetration Tools Exploring N-Stalker, a Vulnerability Assessment Tool.		
10.	Case Study Advanced Cryptography Technique.		