Diwaliba Polytechnic, Mahuva

Subject: INFORMATION SEQURITY   **Date:** 14/08/2024

Course: Diploma CE   **Semester:** 5

Faculty Name: JUHITA THAKOR

Syllabus of Mid-I examination

Unit – I

Introduction to Information Security:
- Basic concepts of information security,
- The OSI security architecture,
- Security attacks,
- Security services,
- Security mechanisms,
- Model for network security.

Unit – II

Encryption Techniques:
- Symmetric cipher model,
- Substitution techniques:
  Caesar cipher,
  Monoalphabetic ciphers,
  Polyalphabetic ciphers,
  Hill cipher,
  Playfair cipher,
- Transposition techniques:
  Rail fence,
  Columnar,
- Introduction of steganography.

Unit – III

Block Ciphers:
- Block cipher principles,
- Introduction to Feistel cipher,
- Data encryption standard,
- Strength of DES,
- Block cipher design principles.

Diwaliba Polytechnic, Mahuva
Uka Tarsadia University, Bardoli

Diploma CE 5th – Semester

MID-I Examination

Subject: INFORMATION SECURITY

Date:

Time: 75 mins
Max. Marks: 30

Instructions:

1. Attempt ALL QUESTIONS
2. Make suitable assumptions wherever necessary.
3. Draw diagrams/figures whenever necessary.
4. Figures to the right indicate full marks allocated to that question.
5. Follow usual meaning of notations/abbreviations.

Q-1	**(A)**	Answer the following. (Any 1)	[04]
		1	
		2	
	(B)	Answer the following. (Any 1)	[05]
		1	
		2	
Q-2	**(A)**	Answer the following. (Any 1)	[04]
		1	
		2	
	(B)	Answer the following. (Any 1)	[05]
		1	
		2	
Q-3	**(A)**	Answer the following in detail. (Any 1)	[02]
		1	
		2	
	(B)	Answer the following in detail. (Any 2)	[10]
		1	
		2	
		3	

Question no.	Unit no.	Marks
Q. 1 (A), (B)	Unit 1	09
Q. 2 (A), (B)	Unit 3	09
Q. 3 (A), (B)	Unit 2	12