

# IT412- SYSTEM ADMINISTRATION & MAINTENANCE

# BACKUP AND DISASTER RECOVERY

01

**Importance of Data Backup and Recovery**

02

**Different Backup Strategies**

03

**Backup Tools and Scheduling**

04

**Developing a Disaster Recovery plan**

# 1. IMPORTANCE OF DATA BACKUP AND RECOVERY

Critical aspect of business continuity and IT management, designed to minimize the impact of unexpected disasters (natural, cyberattacks, hardware failure, etc.) and ensure quick restoration of essential operations.



**Business Continuity**



**Minimizing Downtime**



**Data Protection and Recovery**



**Risk Mitigation**



**Cost Efficiency**



**Customer and Stakeholder Confidence**



**Cybersecurity Preparedness**

**CONT..**

## Key Components of a Disaster Recovery Plan

- Risk Assessment**
- Recovery Objectives**
- Backup Strategy**

**Communication Plan**

**Restoration Process**

# 2. DIFFERENT BACKUP STRATEGIES

01

## Full Backup

Making a complete copy of all the data every time a backup is performed. It is the most comprehensive but also the most time-consuming and storage-intensive.

02

## Incremental Backup

An incremental backup only saves changes made since the last backup

03

## Differential Backup

Saves all changes made since the last full backup. Unlike incremental backups, differential backups grow larger over time but simplify recovery.

# 3. BACKUP TOOLS AND SCHEDULING

## BACKUP TOOLS

Veeam Backup & Replication

Time Machine (macOS)

Windows Backup and Restore

## BACKUP SCHEDULING

Daily Backup

Weekly Backup

Monthly Backup

# 4. DEVELOPING A DISASTER RECOVERY PLAN

## Risk Assessment

Identify potential risks that could lead to disaster and assess their likelihood and impact.

## Recovery Objectives

Define recovery targets for minimizing data loss and downtime after a disaster.

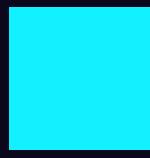
## Backup and Recovery Procedures

Implement backup and recovery methods to ensure quick restoration of data and systems.

## Roles and Responsibilities

Assigns team members to specific tasks.

# CONT..



## **Testing and Validation**

Ensures the plan's effectiveness through regular tests.



## **Plan Documentation**

Provides comprehensive documentation of recovery steps.



# THANK YOU