Practical No :3

Aim: Identifying Resource Schedule of Project using Gantt Chart on Agriculture Product Management System

Introduction

In project management, resource scheduling is a critical process that ensures the optimal use of available resources such as manpower, time, and equipment to achieve project objectives. A **Gantt Chart** is a widely used project scheduling and monitoring tool that visually represents project activities against a timeline.

This practical focuses on scheduling resources for an **Agriculture Product Management System (APMS)**, which is a system designed to manage farmers, products, orders, loans, and companies efficiently. By applying Gantt charts, project managers can track activities, allocate resources effectively, and monitor project progress.

Objective

- To understand the concept of resource scheduling in software project management.
- To create a detailed activity plan for the Agriculture Product Management System.
- To prepare a **Gantt Chart** representing tasks, timelines, and resources.
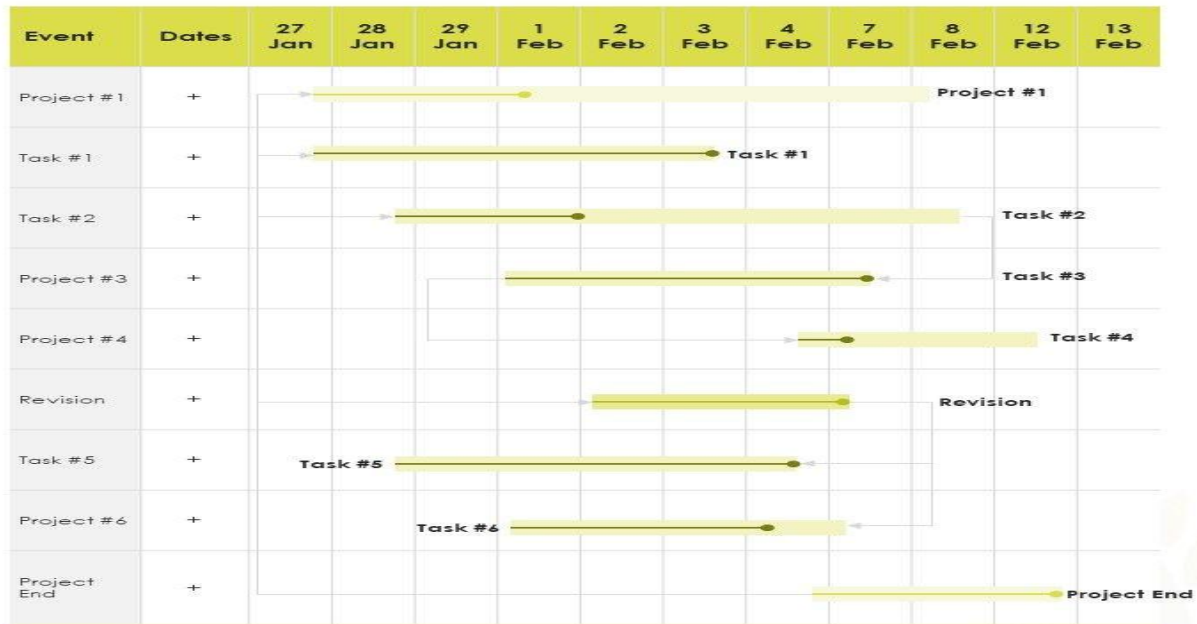- To monitor project progress using scheduling tools.

Resource Scheduling

The Agriculture Product Management System project requires the allocation of resources such as developers, testers, designers, and project managers. The following table highlights the tasks and resource allocation:

Activity	Resource	Duration
Requirement Analysis	Project Manager, Analyst	1 Week
System Design (ER/UML)	System Designer	1 Week
Database Design	Database Engineer	1 Week
UI Design (Login, Dashboard)	UI/UX Designer	1 Week

Activity	Resource	Duration
Backend Development	PHP/Java Developer	2 Weeks
Database Integration	Developer + DB Engineer	1 Week
Testing & Debugging	QA Tester	1 Week

Gantt Chart for Agriculture Project Proposal

Monitoring

- **Progress Tracking**: Each week, the completion of activities will be reviewed against the Gantt chart.
- **Resource Utilization**: Ensure that no resource is over-allocated and that tasks are completed on schedule.
- **Adjustments**: If delays occur, resources may be reallocated or task dependencies adjusted.
- **Reporting**: Weekly progress reports will be generated to monitor performance and risks.

Conclusion

The Agriculture Product Management System project scheduling using the Gantt Chart ensures that resources are properly allocated and tasks are completed within the stipulated time frame. By using resource scheduling and monitoring techniques, project managers can minimize risks, control project timelines, and deliver a successful system implementation.