Date	27 June 2025
Team ID	LTVIP2025TMID28914
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

Solution Architecture:

Workflow for Role-Based Access Control and Task Management

1. **User Identification and Role Assignment**
   o Each team member is assigned a role upon onboarding (e.g., Project Manager, Team Member).
   o Roles determine the level of access and control over project resources and tasks.
2. **Task Creation and Allocation**
   o The Project Manager creates tasks and assigns them to specific team members based on their roles.
   o Tasks are categorized by priority, deadline, and required skills.
3. **Access Control Implementation**
   o Role-based permissions ensure that users only access relevant tools, documents, and information.
   o Admin rights remain with the Project Manager, while members access only assigned task zones.
4. **Task Execution and Status Updates**
   o Team members execute tasks and regularly update progress within the system.
   o Each status change (e.g., In Progress, Blocked, Completed) triggers a notification to the relevant stakeholders.
5. **Review and Feedback**
   o The Project Manager reviews task outputs and provides feedback or approvals.
   o A feedback loop ensures continuous improvement and knowledge transfer.
6. **Reporting and Documentation**
   o The system generates reports on task completion, timelines, and performance.
   o These insights help in future project planning and accountability.

Example - Solution Architecture Diagram:

Figure 1: Architecture and data flow of the Optimizing User, Group, and Role Management with Access Control and Workflows

Optimizing User, Group, and Role Management with Access Control Workflow

User Management

Manage users and groups

Role Management

Define user roles (e.g. Project Manager, Team Member)

Access Control

Assign permissions based on roles

Task Assignment

Assign tasks to users

Approval

Approve tasks if required

Task Updates

Update task status

Audit and Reporting

Review user activities end generate reports

Workflow Automation

Automate task assignmenl and approval

Project Management

Track project progress