**Technology Stack (Architecture & Stack)**

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| Date | 24 June 3035 |
| LTVIP2025TMID30609 | LTVIP2025TMID30609 |
| Project Name | Workforce Administration Solution(dev) |
| Maximum Marks | 4 Marks |

**High-Level Architecture Overview**

A workforce administration solution's high-level architecture typically involves several key components that work together to manage and optimize an organization's workforce. These include strategic planning, forecasting, scheduling, staffing, and performance management, all underpinned by a robust data infrastructure and integration with other business systems.

1**. Presentation Layer (User Interfaces)**

* Web Portals: Employee, Manager, and HR portals built using Salesforce Experience Cloud
* Mobile Access: Supported via Salesforce Mobile App
* Self-Service Dashboards: Personalized views for different user roles

**2. Application Layer (Core Business Logic)**

* Salesforce Platform Services:

**3. Data Layer**

* Standard and Custom Salesforce Objects for:
* File Storage: Salesforce Files or external (e.g., AWS S3, SharePoint)

**4. Integration Layer**

* MuleSoft or REST/SOAP APIs to connect with:
* Salesforce Connect for real-time external data access

**5. Analytics & Reporting Layer**

* CRM Analytics (Tableau CRM) for:
* Scheduled Reports for HR and leadership

**6. Security & Governance**

* Role-Based Access Control (RBAC)
* Salesforce Shield for encryption and monitoring
* Audit Trail & Field History
* Compliance with GDPR, SOC 2, ISO 27001

**Architecture Components**

**Layer**  **Component**

User Interface Salesforce Experience Cloud (for employee & manager portals)

Application Logic Salesforce Platform (Lightning Components, Apex Controllers)

Process Automation Salesforce Flow, Process Builder, Approval Processes, Workflow Rules

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| Layer | Component |
| Data Layer | Custom & Standard Objects (e.g., Employee, Leave, Attendance, Review) |

Analytics & Reports Salesforce CRM Analytics (Tableau CRM), Dashboards, Scheduled Reports

Integration Layer MuleSoft, Salesforce Connect, External Services, REST/SOAP APIs

Authentication Salesforce Identity, Single Sign-On (SSO), OAuth 2.0

Security Salesforce Shield, Field-Level Security, Role-Based Access Control (RBAC)

Mobile Access Salesforce Mobile App (Lightning Mobile SDK support)

Document Storage Salesforce Files, External Doc Storage Integration (e.g., SharePoint, AWS)

**3. Key Integrations**

System Integration Method Purpose

Payroll System MuleSoft / REST API Sync employee details, leave data, benefits

ERP/Finance Salesforce Connect or Custom API Cost allocation, salary budgeting

Email / Calendar Salesforce + Outlook/Gmail Connector Meeting scheduling, interview tracking

4. Security & Compliance

* Role-based access control (profiles, permission sets)
* Field-level and object-level security
* Data encryption (Salesforce Shield)