Designing Enterprise System Architecture

Scenario

A hospital system needs ERP support for patient records (**HRM**), billing (**Finance**), procurement medical supplies (**Procurement**), and scheduling (**Inventory/ Logistics**). The group decides to use **cloud -based ERP architecture** because it reduces IT costs and allow doctors/ nurse to access records remotely.

Task 1

Identify Business Functions

Business Process	Descriptions
Patient Records	Maintains and updates patient demographic details, medical history, and treatment records.
Billing	Manages patient billing, insurance claims , and payment tracking.
Pocurement of medical supplies	Handles ordering and purchasing of medical supplies, drugs and equipment.
Scheduling	Organizes staff schedules , patient appointments, and availability of medical resources.

Task 2

Map ERP Modules

Business Process	ERP Module
Patient Records	HRM
Billing	Finance
Pocurement of medical supplies	Procurement
Scheduling	Inventory/Logistic

Task 3

Choose an Architecture

Architecture Type: Cloud -base ERP architecture

A cloud-based ERP is the right fit for our hospital because it reduces IT costs and maintenance, allowing us to focus more on patient care. It gives doctors, nurses, and staff secure access to records and schedules from anywhere, which is especially helpful during emergencies or when working remotely. As the hospital grows, the system can easily scale to support more users and departments without the need for major upgrades. It also keeps patient data safe and compliant with healthcare standards. Since all modules are connected, any update—such as changes to patient information or inventory—is instantly reflected across the system, improving coordination and reducing delays. With built-in backups and regular updates, we are always protected and up to date.

Task 4

Diagram Creation