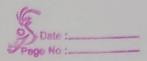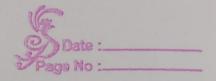b) SRS document for stock maintenance system

1. Introduction:

1.1 Purpose of the document: to specify the software requirements for a stock maintenance system, which helps manage and track inventory levels, orders, sales & deliveries

1.2 Scope of the document: users can add, update, and remove stock items, track stock levels, generate reports & manage suppliers. The system supports notifications for low stock levels and facilitates order management

1.3 Overview: this document provides detailed info about the requirements & general procedures for stock maintenance.

2. General description:

2.1 Product perspective

- staff perspective: view details of stock items, including quantities, descriptions, prices & suppliers; generate & view reports on stock levels, sales and orders.

- management perspective: access analytical dashboards for inventory trends, low stock alerts and financial summaries; manage supplier details & performance.

2.2 Product functions:

- add / update / delete stock items
- track stock levels & manage reordering
- generate reports
- manage suppliers & purchase orders
- receive notifications for low stock levels

2.3 User characteristics:

inventory

- users include ~ staff, managers & suppliers
- staff must have basic computer skills to operate the system.

2.4 General constraints:
- users must have appropriate permissions to add or modify stock.
- the system must operate within the organisation's existing IT infrastructure
- stock updates should occur in real-time to ensure data accuracy

2.5 Assumptions & dependencies:
- users will input accurate stock information
- the system will rely on existing database infrastructure for data storage
- users will have internet access for online features if applicable.

3. Functional requirements:
- Stock management system: users can add new stock items including SKUs, descriptions & quantities; users can update existing stock details & remove stock items as necessary
- reporting system: generate reports on inventory levels, sales data & supplies info
- notification system: automated alerts for low stock levels & reorder reminders
- supplier management: add and manage supplier details, including contact info and pricing

4. Non functional requirements:
- Performance: the system should process stock

updates with 2 seconds
- scalability : capable of inventory details for at least 10,000 stock items
- Security
- Usability : Intuitive UI

5. Interface requirements :
- UI interface : be intuitive and easy to navigate
- API : enables external systems to interact with the stock maintenance system
- Database interface : responsible for interacting with underlying database to manage stock and related data.

6. Performance requirements :
- response time should be within 2 seconds
- availability should be 99.9% of the time.
- should prove user-friendly error messages & recovery options
- all sensitive data needs to be encrypted in storage & transmission.

7. Design constraints :
- database must be relational DBMS to maintain inventory data
- Should be build used microservices for modular functionality
- standard server hardware

8. Preliminary schedule & budget : an estimate of 5 months is needed to complete the project

which includes hiring staff/engineers, planning
& designing the architecture, developing and
testing the system. Also the required budget
is ₹35 lakhs.