**E-Commerce Management System**

**Project Title:**

Online Shopping and Order Management System

**Current Business Processes:**

1. Customer orders are received manually via phone calls or in-person visits.

2. Product information is kept in notebooks or spreadsheets.

3. Stock levels are not updated in real-time, leading to stockouts or overstocking.

4. Payments are recorded manually, making tracking and reconciliation difficult.

5. Customers cannot track their order progress or delivery status.

**Problem Statement:**

Manual handling of sales and inventory in e-commerce operations results in errors, poor customer

satisfaction, and delays in delivery. The business cannot easily analyze sales trends or monitor

stock efficiently.

**Proposed Business Processes:**

1. Online customer registration and account management.

2. Product listings with price and category details stored digitally.

3. Automated order placement, payment, and confirmation process.

4. Real-time inventory management with automatic updates.

5. Delivery status tracking and report generation.

**Entities and Attributes:**

- Customer (CustomerID, Name, Email, Contact, Address)

- Product (Product-ID, ProductName, Category-ID, Price, Quantity in Stock)

- Category (Category-ID, Category-Name, Description)

- Order (Order-ID, CustomerID, Order-Date, Total Amount, Status)

- Order Item (Order Item-ID, Order-ID, Product ID, Quantity, Subtotal)

- Payment (Payment-ID, Order-ID, Payment Date, Amount, Status)

**Conclusion:**

The implementation of database management systems in Library, Hostel, and E-Commerce

organizations ensure better data accuracy, efficiency, and security. These automated systems

reduce human errors, improve reporting, and support better decision-making processes. A

well-designed database helps manage critical information and enhance productivity in any modern

organization.