

Data Flow Diagram Practice 1

14 marks

A local community library is developing a new digital system to manage its lending services. The system needs to allow library members to borrow and return books and enable librarians to manage the book collection and access member details.

Key features required for the system:

- Library Members can search for books, borrow books, and return books.
- Librarians can add new books to the collection, remove lost or damaged books, and view member borrowing history.
- The system must maintain records of book availability and member accounts.

Symbolise the data flow for this library system using a Data Flow Diagram (DFD).

Data Flow Diagram Practice 1 Mark Guide

14 marks

Symbolisation	Marks	Logic and structure	Marks
External Entities	Provides correct symbol for data source [1 mark]	External Entities	Library Member [1 mark] Librarian [1 mark]
Processes	Provides correct symbol for Processes [1 mark]	Processes	Manage Book Search [1 mark] Handle Book Borrowing [1 mark] Process Book Return [1 mark] Maintain Book Collection [1 mark] Provide Member Reports [1 mark]
Data Stores	Provides correct symbol for data store [1 mark]	Data Stores	D: Data Store [1 mark]
Data flows	Provides correct arrows with one way flow [1 mark] Provides correct labels that explain relationships [1 mark]	Data flows	Demonstrating correct movement of information between entities, processes, and data stores [3 marks]