**Data Dictionary:**

Information pertaining to the structure and usages of data in the database, the metadata is maintained in a data dictionary. The term system catalog describes the metadata. The data dictionary, which is a database itself, documents of data. Each database uses can consult the data dictionary to learn what each piece of data and various synonyms of the data field mean.

In an integrated system that is in a system where the data dictionary is part of the DBMS; it contains the source of each data field value, the frequency of its use, an audit trail concerning updates, including the one who and when of each update.

In simple words, a data dictionary is a structured repository of data about data. It is a set of rigorous definition of all DFD data elements and data structures used to develop the application. A data dictionary has many advantages. The most obvious is documentation. It serves as a valuable document to the organization at the time of future enhancement. During implementations, it serves as common bases against which programmers who are working on the system compare their data descriptions. Also control information maintained for each data element is cross-referenced in the data dictionary.

Most database management system has a data dictionary as a standard feature. In data dictionary three classes are defined. They are data space elements, data structures, and data flows and data stores.

* Data Elements: It is the smallest unit of data that provides for no further decomposition.
* Data structures: It is a group of data element handled as a unit.
* Data Flows and Data Stores: They are data structures in motion and data structures at rest respectively

In constructing the data dictionary, the analyst has to consider several points.

* Each data flow in the DFD has one data dictionary entry.
* Definitions must be readily accessible by name.
* There should not be data redundancy in the data definition.
* The procedures for writing definition should be precise.