

CHAPTER 1 OVERVIEW OF SYSTEM

SYSTEM ANALYSIS AND DESIGN

DEFINITION OF SYSTEM

A system is a collection of components that working together to realize some objectives forms a system. Basically there are three major components in every system namely input - processing - output.

CHARACTERISTICS/PROPERTIES OF A SYSTEM

- 1. ORGANIZATION :** It implies structure and order element should be well arranged in order to achieve predetermined objective.
- 2. INTEGRATION:** It should show how components of system are tied together. The part of the system must work together within the system even though each part performs a unique function.

3. INTERACTION: Interaction refers to the procedure in which each component functions with other components of a system. The inter relationship between these components enables the computer to perform.

4. INTERDEPENDENCE: Interdependence means that the components of the organization or computer system depend on one another. They are co-ordinate and linked together in planned way to achieve an objective.

5. CENTRAL OBJECTIVE : The central objective is an important characteristic of a system. Objectives may be real or stated. Although a stated objective may be the real objective. The important point is that users must be aware about the central objective well in advance.

6. DECOMPOSITION : Decomposition of a system defines the division of a system into various sub systems . The decomposition of a system into sub system allows to perform complex tasks with grater ease.

ELEMENTS OF A SYSTEM

- **INPUTS & OUTPUTS:** The information that enters in a system is treated as input. Output is the outcomes of input after processing.

The main aim of a system is to produce an output which is useful for its users.

◎ **PROCESS:** Process is defined as the components that performs the necessary transformation on input to produce the desired output .

In other words “processing transfer the input into useful output .

. **CONTROL :** These elements guides the system.

It is a decision making elements that control the pattern of activities governing input, processing and output.

. **FEEDBACK :** Positive feedback encourages the performance of the system.

Negative feedback is informational in nature.

TYPES OF A SYSTEM

The various types of system are :

1. Abstract system
2. Physical system
3. Open system
4. Close system
5. Man made information system
6. User machine system
7. Temporary & permanent system