What is Software Design Process ?

Software design process is a process to user requirements after analysis in suitable form so that a programmer can write coding or implements it.

Software design process is an important stage in SDLC (Software development life cycle ) model.

Each SDLC model is having a software design process.

Some of the SDLC models where software design process exist :

1) Waterfall model
2) Prototype model
3) Spiral model, etc

What are Software Design Concepts ?

1) Abstraction :

2) Refinements :

3) Modularity :

4) Control Hierarchy :

5) Software Architecture :

6) Data Structure :

7) Structural Partitioning :

8) Software Procedure :

9) Information Hiding :

What are Software Design Principles ?

According to Grady Booch, software design principles are PHAME (Principle of Hierarchy, Abstraction, Modularization, Encapsulation).

1) Hierarchy :

2) Abstraction :

3) Modularization :

4) Encaptulation :

What is Software Modeling ?

In Software engineering Software Modeling is an artificial language which is used to represent a system or component of a system in structure language form. The structure is a consistent set of rules.
A software modelling language can be graphical or textual based on the developer requirements.

Some examples of software modelling language are :

1) UML : Unified Modelling Language, is general modelling language used to describe a software both structurally and behaviourally. It uses graphics and text notations.

2) SysML : System Modelling Language, is a general purpose language for system engineering.

3) Flow Chart : It is a schematic representation of step by step procedure or an algorithm.

4) BPMN : Business Process Modelling Notation, is used for process modelling.