**REQUIREMENTS OF GOOD STRUCTURAL DESIGN**

The design of any structure is the fundamental soul of manmade creation. The design is the process of imagining and planning the creation of objects. It is a vast concept and, its meaning can vary from one field to another and from one object to another. The requirement of a good structural design is to design the structure for stability, strength and serviceability. It must also be economical and aesthetic.



The main objective of structural design is to produce a structure which is capable of resisting all applied loads and provide basic needs to occupants without failure during its lifespan. So, structural design basically aims at providing the strength, stability, serviceability, safety, and durability of the structure during its intended life without failure, with minimum repair and maintenance.

**The design of a structure must satisfy following basic requirements:**

1. if the object is intended for use, it should be suited to its purpose.is the shape or form of the object is suitable to the intended purpose of object.
2. It should be simple and well proportionate
3. Appropriateness of material of which it is made and to the process which will be followed in making it. Are the materials used appropriate and practical for the purpose?
4. Stability to prevent overturning, sliding or buckling of the structure, or parts of it, under the action of loads,
5. Strength to resist safely the stresses induced by the loads in the various structural members;
6. Serviceability to ensure satisfactory performance and durability (including corrosion-resistance), etc.