

## **FAQs**

### **1. List down the various loads acting on to long span structures.**

- Dead Load
- Live load
- Wind load
- Stresses created by temperature difference
- Stress created by other form of disruption including ground movement, vibration, deformation or earthquake

### **2. Define Form Active systems with different types.**

Form active systems are systems of flexible, non-rigid matter, in which the redirection of forces is effected by particular form design and characteristic form stabilization.

- Cable Structures
- Tent Structures
- Pneumatic Structures
- Arch Structures

### **3. List down the types of large span structures(based on systems)**

- Form Active Systems
- Vector Active Systems
- Section Active Systems
- Surface Active Systems

### **4. Define Vector Active systems with different types.**

Vector active systems are systems of short, solid, straight lineal members, in which the redirection of forces is effected by vector partition, i.e. by multidirectional splitting of single force simply to tension or compressive elements.

- Flat Trusses
- Curved trusses
- Space trusses

## **5. Brief about Pneumatic structures**

The word pneumatic is derived from the Greek word "pneuma" meaning breath of air thus these are the structure which are supported by air.

These structures has been used by mankind for thousand of years but in the building technology it was introduced only about 40 years ago.

Its principle is the use of relatively thin membrane supported by a pressure difference.

Through increasing the inside air pressure,

- The dead weight of the space envelope is balanced
- The membrane is stressed to a point where it cannot be indented by asymmetrical loading.
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### **Types of pneumatic structure:**

- Air – supported structures
- Air – inflated structures