FAQ's

1. What is a frame structure?

A frame structure or truss is composed of several bars, jointed together in a particular manner and these bars are called as the member.

2. Differentiate the two types of frames

Statically Determinate Frames	Statically Indeterminate Frames
Determinate frames are analysed just by the use of basic equilibrium equations. By this analysis, the unknown reactions are found for the further determination of stresses.	Indeterminate structures are not capable of being analysed by mere use of basic equilibrium equation. Along with that some extra conditions are required to be used like compatibility conditions

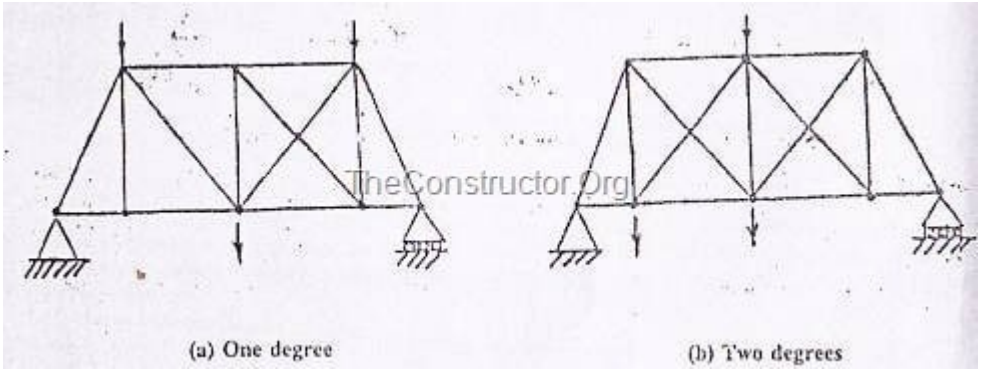
3. Write the assumptions made in analysis of frames

-All joints are pin jointed
-Frame is loaded only at its joints
-Frame is a statically determinate one
-Weight of the members are assumed to be negligible
-Forces induced in the members are axial
-All the members are in a single plane

4. What are all the types of supports for trusses

- Roller support
- Hinged support
- Simply supported ends
- Fixed support

5. Analyze the static determinancy of the given frame



Thus the truss shown in figure 6(a) is statically redundant by one degree because there are 14 members and 8 joints.

Number of redundant members = m= 2j – 3

= 14 – (16 – 3) = 1

Similarly, the truss shown in figure 6(b) is internally redundant by two degrees