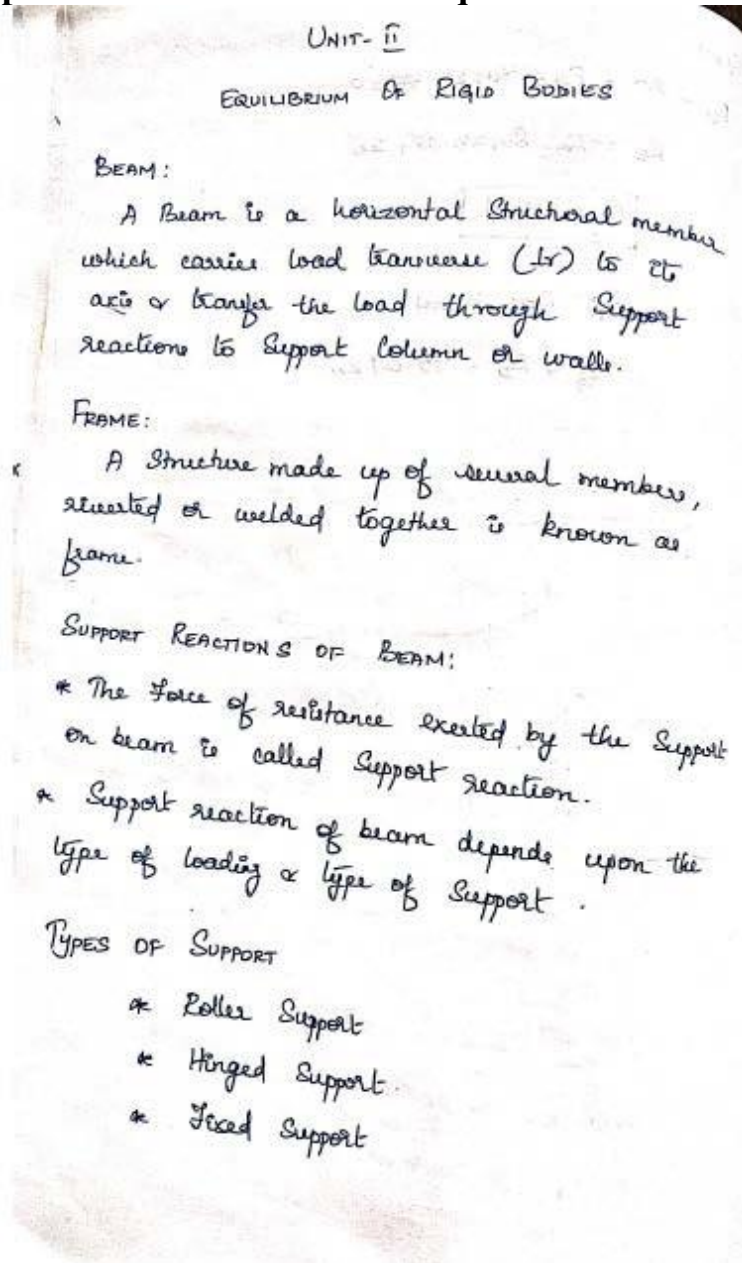


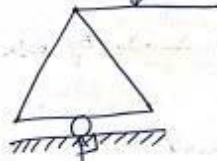


## Types of supports and their reactions - requirements of stable equilibrium

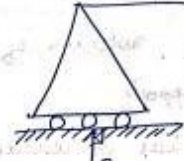


\* ROLLER SUPPORT

Simplest type of Support  
Beam



Single Roller



Group Roller

Roller Support has only for loading or force

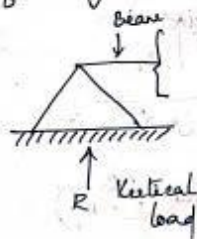
\* HINGED SUPPORT (PIN JOINT SUPPORT)

→ This type of Support can withstand any type of force both Horiz: & Vert: forces.

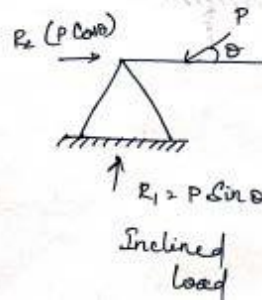
→ Even though load is vertical, it can offer 2 Reaction forces

→ At some cases, reaction is vertical only or Horiz: force is zero.

→ If loading is inclined, then rxn also inclined.



Vertical load



Inclined load