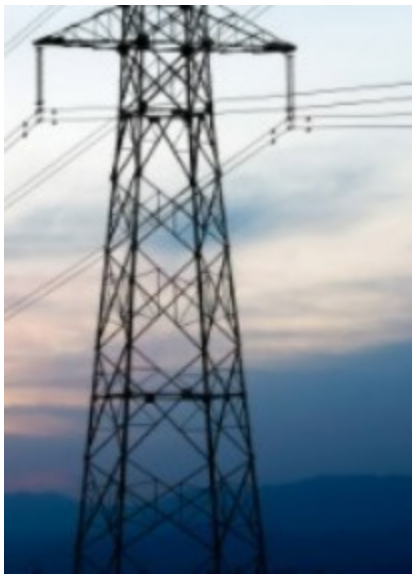
AMRITA VISHWA VIDYAPEETHAM | School of Engineering

GROUP MEMBERS:

1. **Ronak Agrawal (AM.EN.U4AIE21087)**
2. **Aashraya Katiyar (AM.EN.U4AIE21085)**
3. **Nikhil Kumar Singh (AM.EN.U4AIE21086)**
4. **Konda Venkata Sai Sumitha (AM.EN.U4AIE21040)**
5. **B.Nandana (AM.EN.U4AIE21021)**
6. **Akshaj.S.R (AM.EN.U4AIE21009)**

AMRITA VISHWA VIDYAPEETHAM | School of Engineering



Question no 1

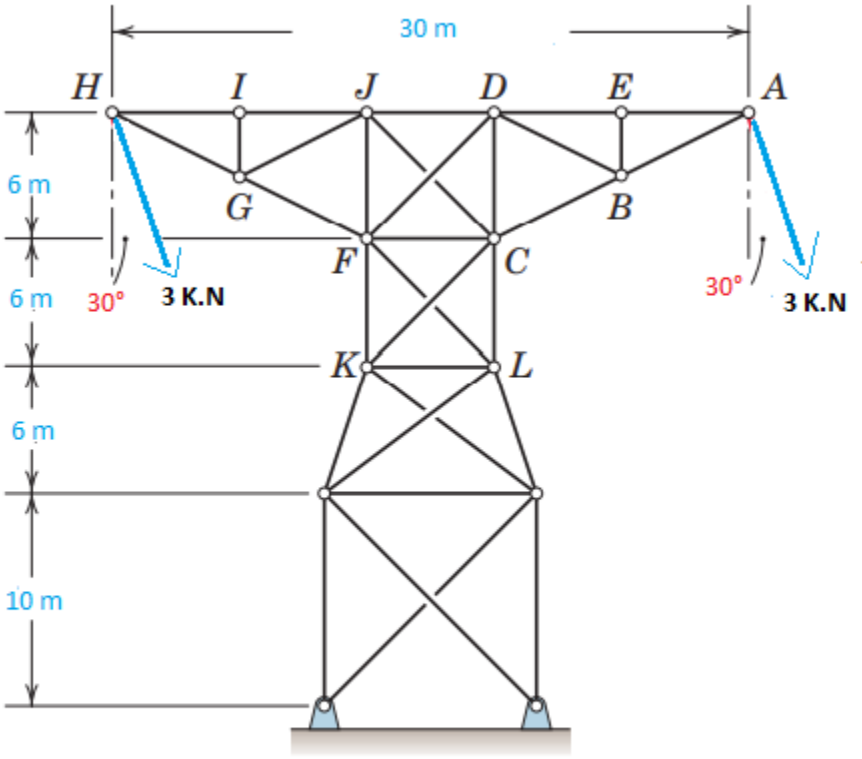


FIGURE 1

The tower for a transmission line is modeled by the truss shown. The crossed members in the center sections of the truss may be assumed to be capable of supporting tension only. For loads of 3 kN applied in the vertical plane, compute the forces induced in members AB, DB, and CD

To solve → Find the tensile or compressive force in the component of the structure of the tower.

Methodology → We will use the method of joints to solve this problem as well as concepts of tension, equilibrium, moment, truss, forces, and vectors.