

- It is required to design the shown intermediate frame for the following data:

- Breadth of the frame ( $b$ ) = 30 cm
- Material used are concrete C250 and St 36/52

**Required:**

1. Maximum internal forces (N.F., S.F., and B.M.D<sup>s</sup>).
2. Dimensioning of different parts of the frame.
3. Check shear stresses and calculate diagonal tension.
4. Draw to scale 1:25 sectional elevation showing the details of reinforcement as well as sufficient cross sections.

