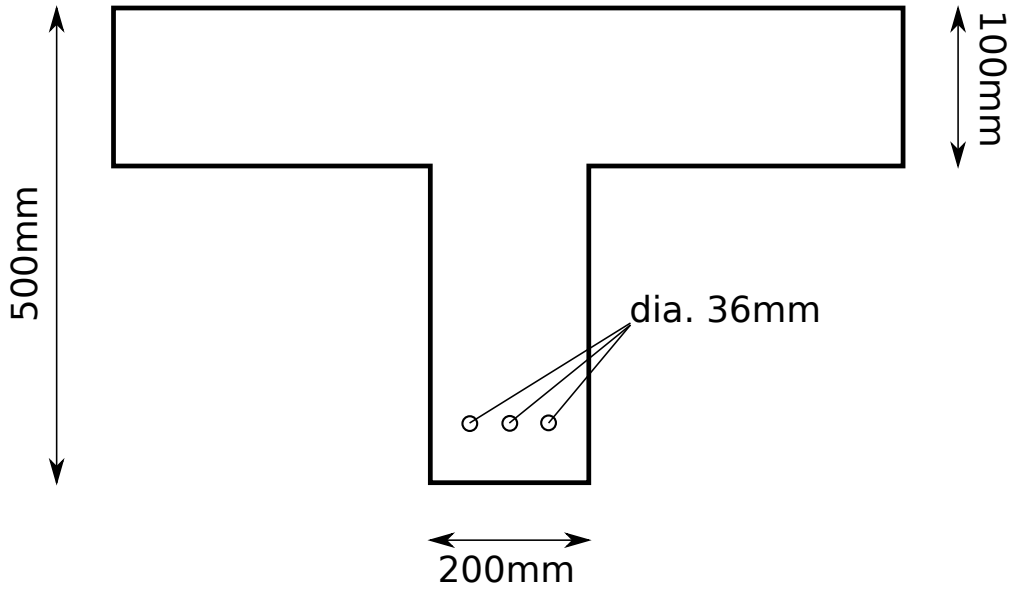
DEPARTMENT OF CIVIL ENGINEERING
ITER, SoA University
Reinforced Concrete Design (CVL4121)
Minor Assignment 3

1 Analyze the section given below of M25 concrete and Fe250 steel resting on shear walls at a distance 6m center-to-center. Nominal/clear cover to be used for moderate condition (IS 456-Table 16). b_f is calculated according to slab section analyzed as T-beam in Clause 23.1.2:IS456-2000.



- Find out depth of neutral axis using WSM by checking both cases i.e. $D_f > kd$ and $D_f < kd$.
- Find allowable moment for above case (WSM).
- Find out depth of neutral axis using LSM (non-linear stress profile) by checking both cases i.e. $D_f > kd$ and $D_f < kd$.
- Find allowable moment for above case (LSM).

Refer Example 4.4, 4.5, 4.9 and 4.10 of textbook