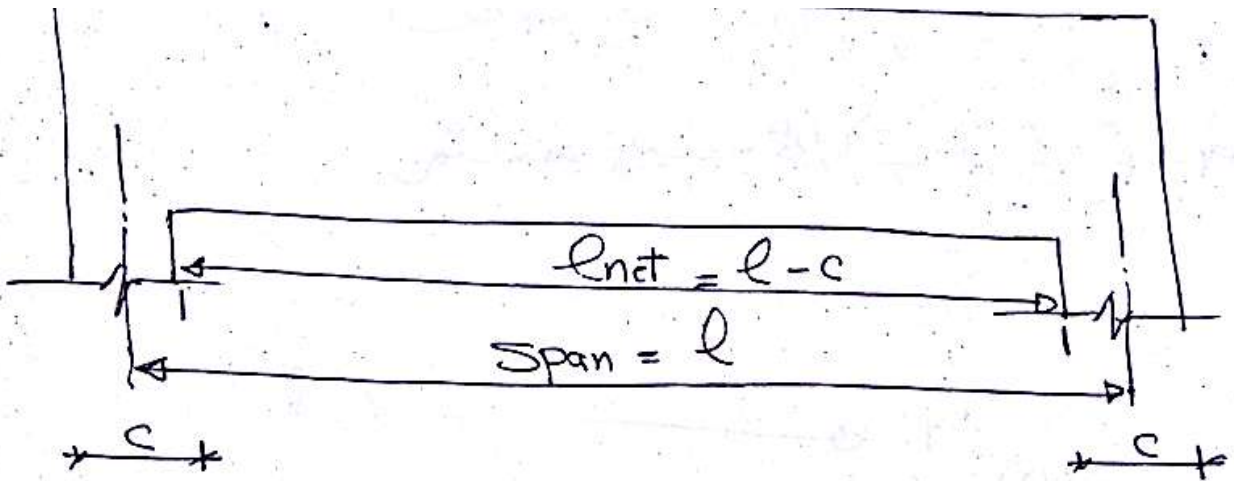

Continuous Beams

Details Of Reinforcement
By Empirical Method

Eng:-Ahmed Yehia



$$l_{net} = l - c$$

span - عرض التحوط

② Types of Support:

⑤ أنواع الدعامات

③ roles of Reinforcement Curtailment

مراحل توقف الحديد :-

كود

① من $\left(\frac{1}{4} - \frac{1}{6}\right)$ الاستيخ يستمر

② من $\left(\frac{1}{4} - \frac{1}{6}\right)$ الاستيخ يتوقف

① من $\left(\frac{1}{4} - \frac{1}{6}\right)$ الاستيخ يتوقف

② من $\left(\frac{1}{4} - \frac{1}{6}\right)$ الاستيخ يستمر

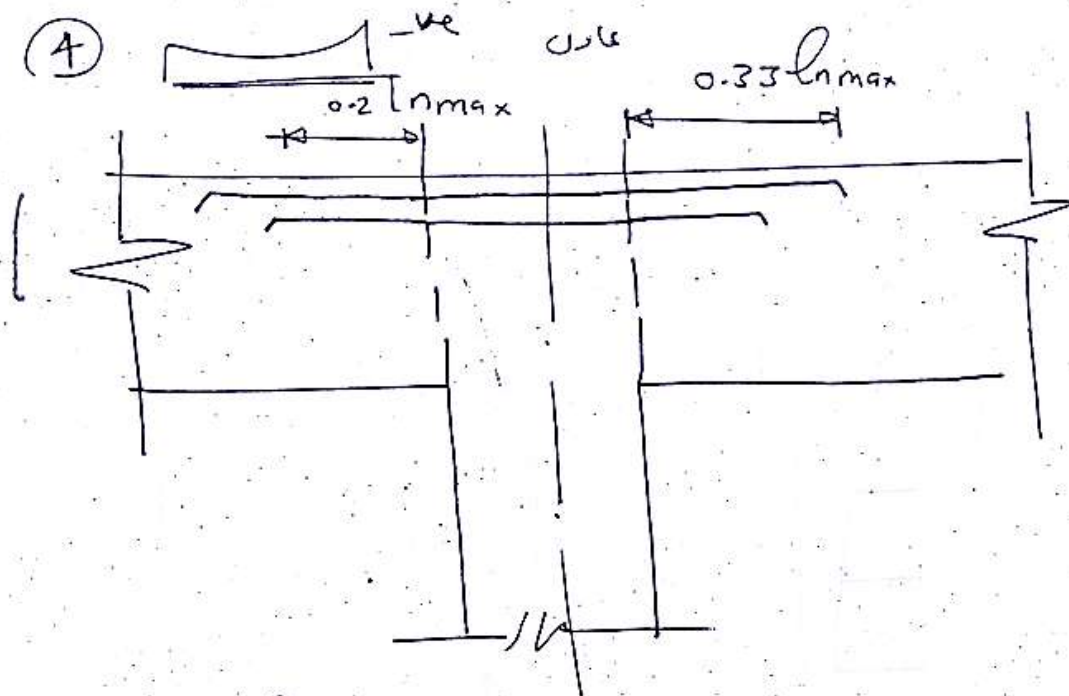
b ————— n_{max}

250 ————— 4

300 ————— 5

350 ————— 6

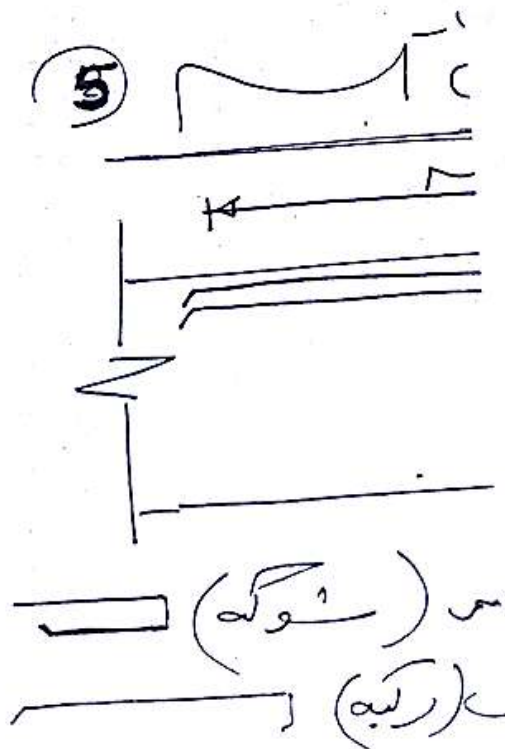
④



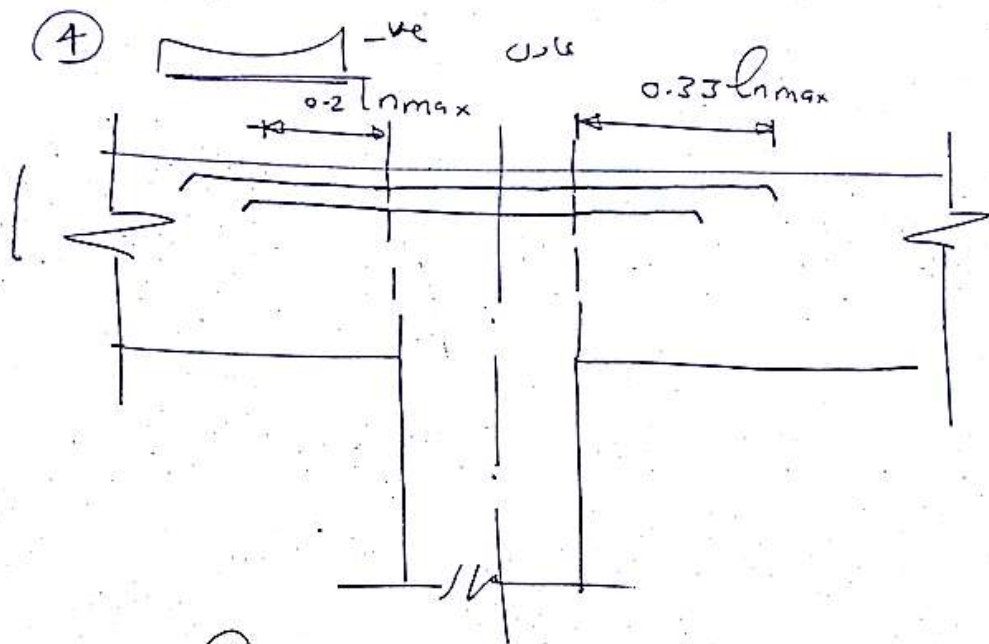
$0.33 \ln_{max}$
 $0.2 \ln_{max}$

① ϕ به هستر

⑤

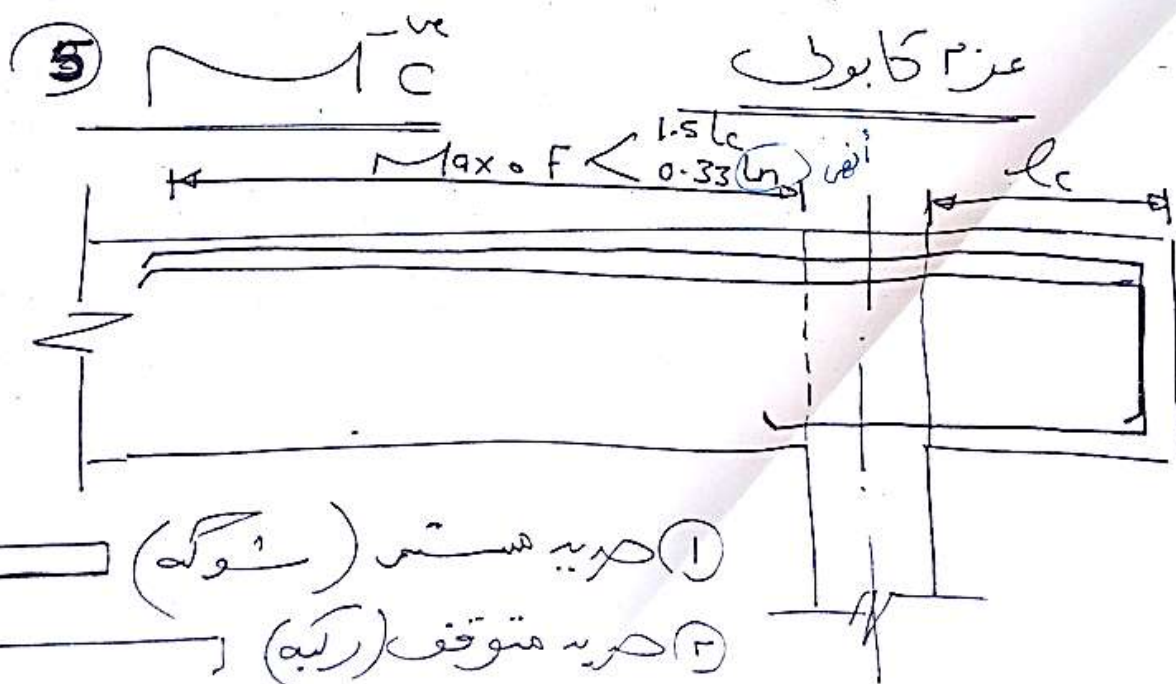


س (نوگه)
 ک (نیه)

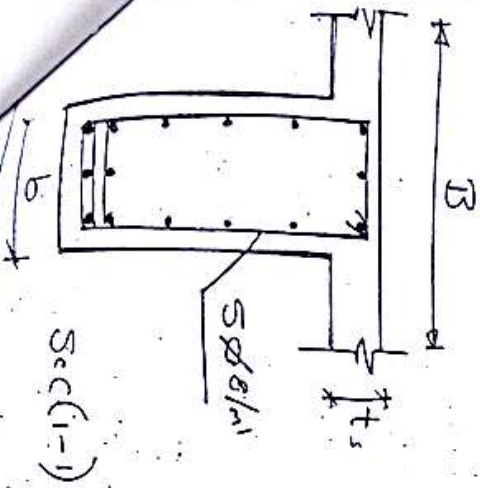
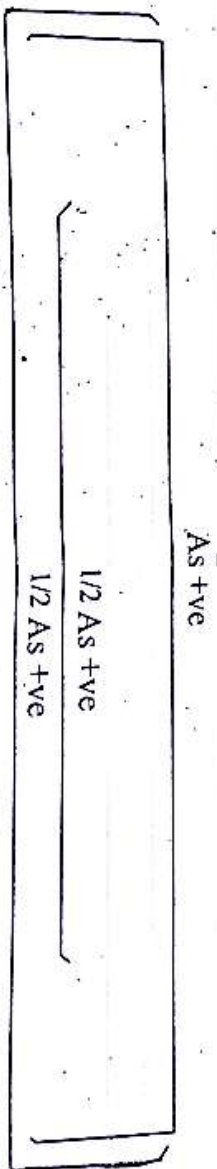
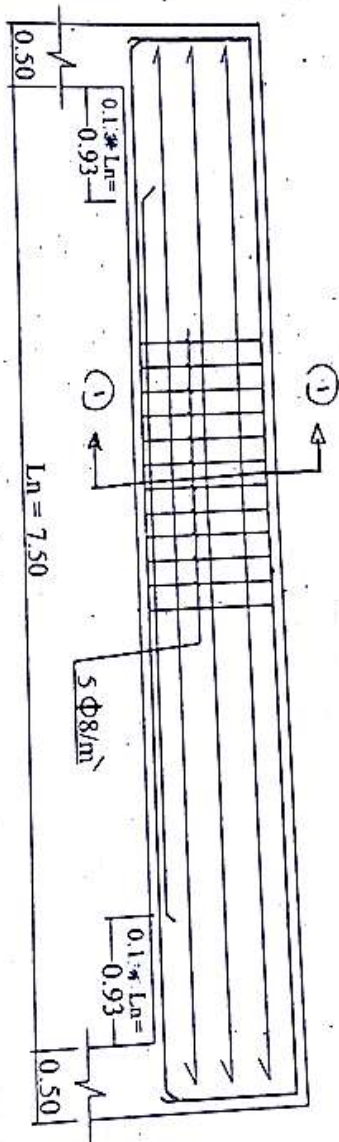
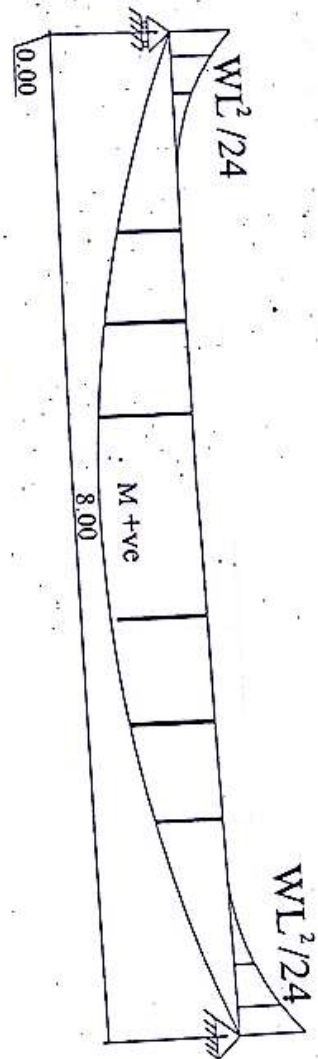


① حربه ستر $0.33 l_{n \max}$

② حربه متوقف $0.2 l_{n \max}$



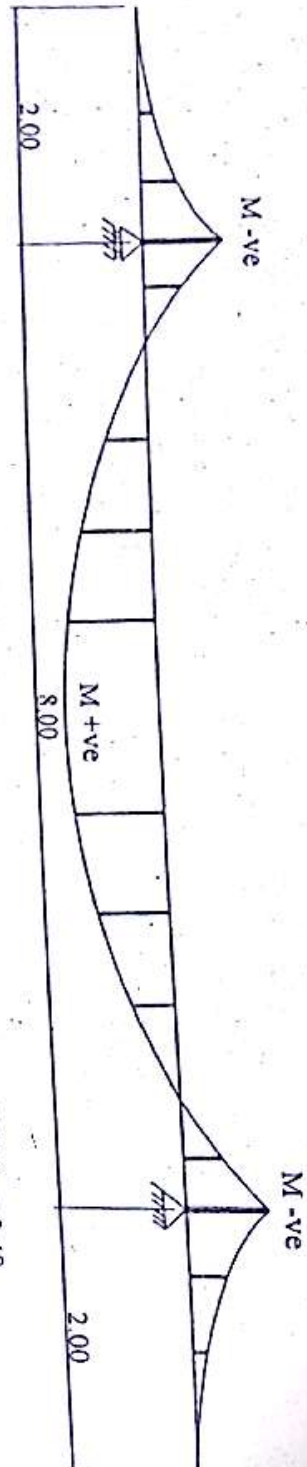
-- Simple Beam --



Sec (1-1)

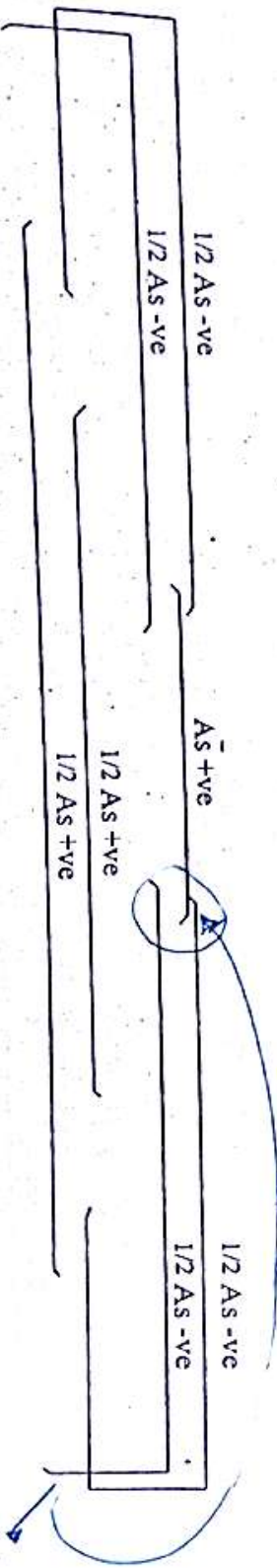
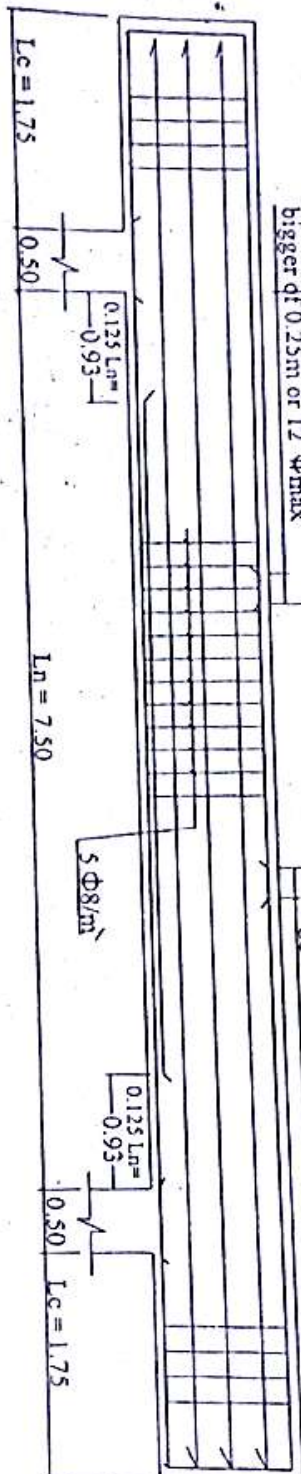
- 1 -

-- Simple with Double cantilever--



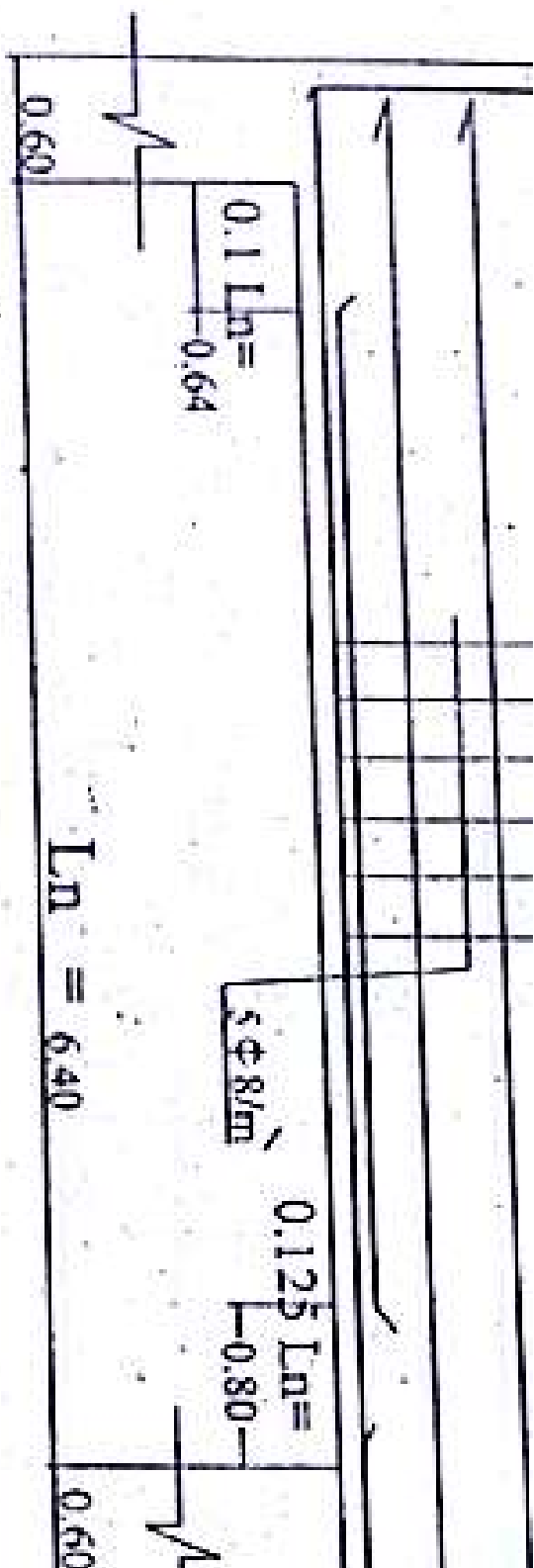
bigger of $1.5 \times L_c = 2.63$ or $0.33 L_n = 2.48$
bigger of $0.25m$ or $12 \phi_{max}$

bigger of $1.5 \times L_c = 2.63$ or $0.33 L_n = 2.48$
bigger of $0.25m$ or $12 \phi_{max}$



-2-

للمساحة المتبقية
من الحديد



$A_s +ve$

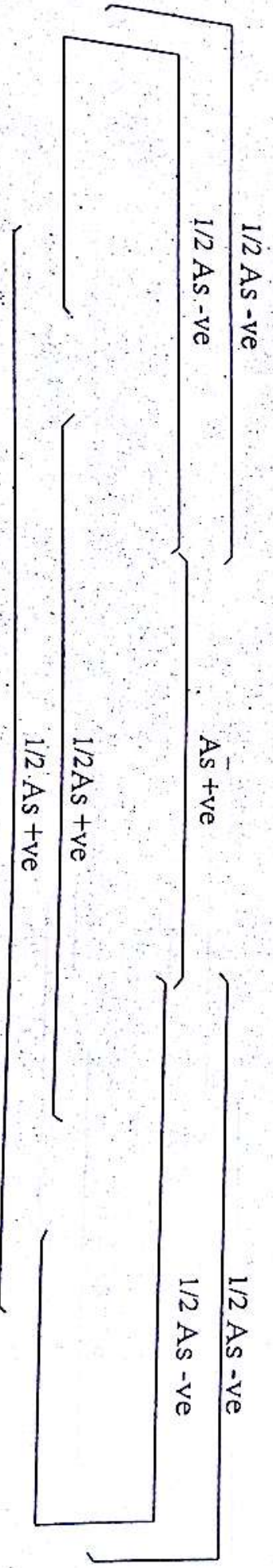
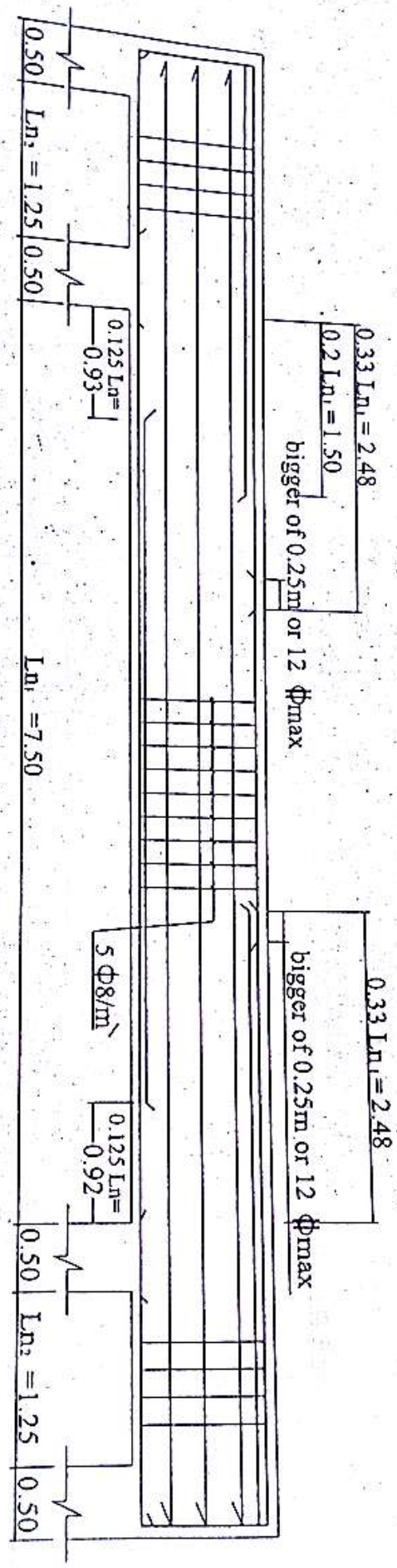
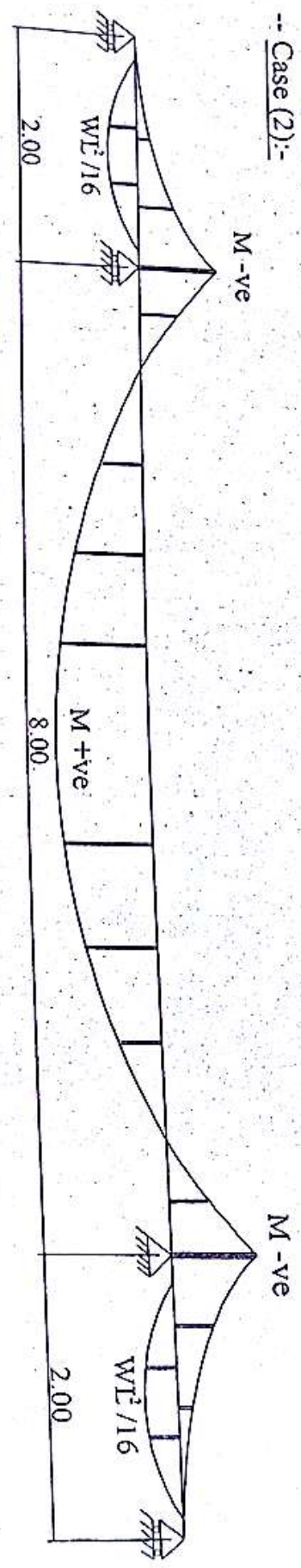
$1/2 A_s +ve$
 $1/2 A_s +ve$

$1/2 A_s$
 $1/2 A_s$

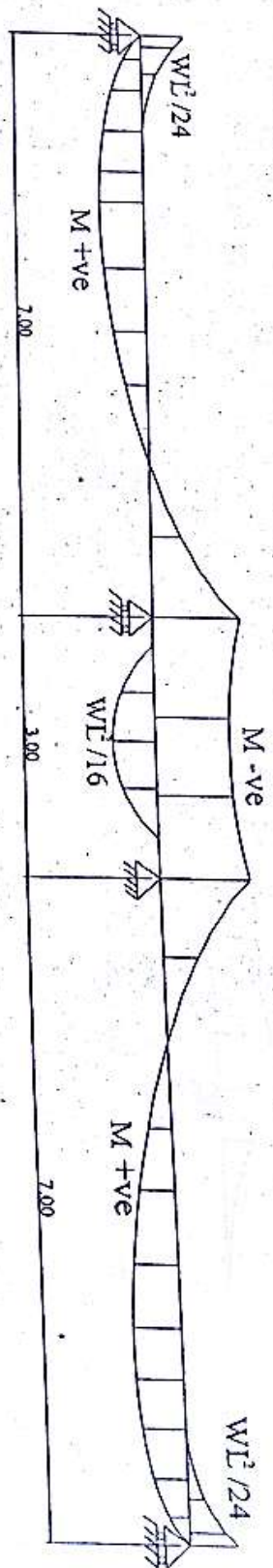
Special Cases

siya paun

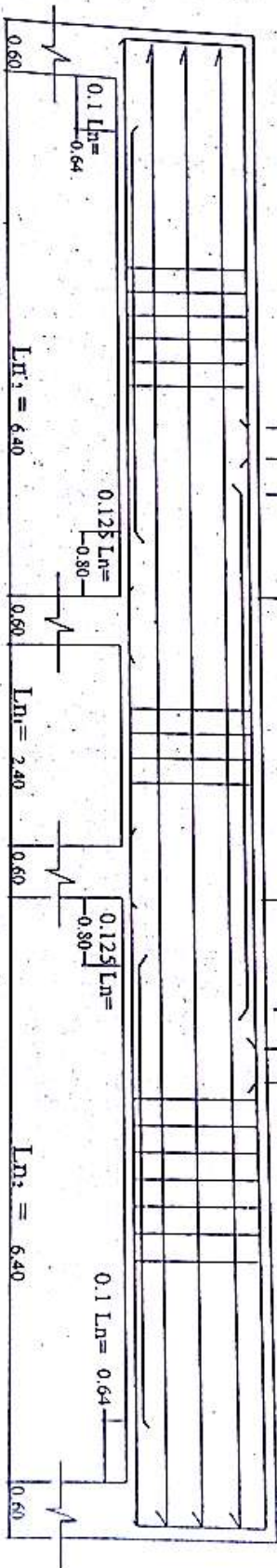
-- Case (2) :-



-- Case(1) :-

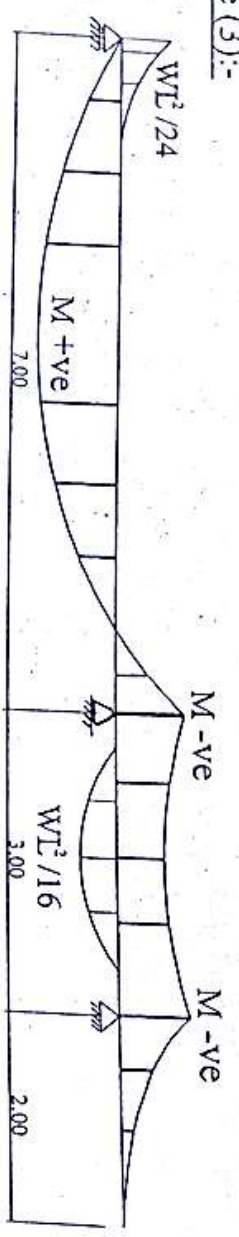


$0.33 L_n = 2.11$
 $0.2 L_n = 1.28$
 bigger of 0.25m or 12 ϕ_{max}



AS +ve
 1/2 AS +ve
 1/2 AS +ve
 AS +ve
 1/2 AS -ve
 AS for $WL^2/16$
 1/2 AS +ve
 1/2 AS +ve

-- Case (3) :-



bigger of $1.5 \times L_c = 2.55$ or $0.33 L_n = 2.11$

bigger of 0.25m or 12 ϕ max

