

SHEET (4)

Design of sections:

- Design the following sections for the given data *by using Ultimate design method.*

- The used concrete and steel have grades as shown.

- In Sec No.9 Take B=145 cm.

Sec. No.	b (mm)	t (mm)	ts (mm)	Type of section	Mu (KN.m)	Fcu (MPa)	Fy (MPa)
1	250	---	---	Rec	170	25	360
2	120	---	---	Rec	85	25	360
3	250	---	---	Rec	170	30	360
4	250	---	---	Rec	170	25	400
5	250	600	---	Rec	150	25	360
6	400	900	---	Rec	660	25	360
7	250	700	---	Rec	200	30	360
8	250	---	120	T	220	25	360
9	250	---	120	T	240	25	360
10	120	600	120	T	200	25	360
11	120	---	120	L	180	25	360