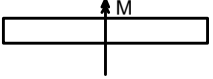
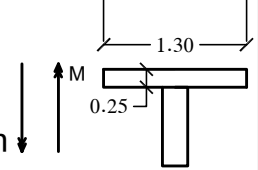

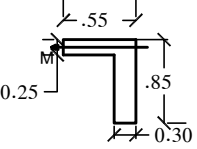
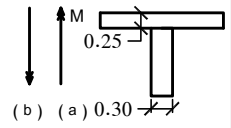


1) Design the following R.C Sections as ordinary sections :

| Sec No. | M ( ton. m) | N ( ton) | Shape Of Section   |
|---------|-------------|----------|--|
| 1       | 0.0         | +40      | Rect . Sec . b =1 m  |
| 2       | 0.0         | -40      | Square Sec .   |
| 3       | 2.5         | +9.6     | Rect . Sec 0.3 * 1 m  |
| 4       | 6.25        | +10.3    | Rect . Sec . b =1 m  |
| 5       | 48          | 0.0      | T Sec .               |
| 6       | 19.5        | +1.8     | Rect . Sec . b =0.3 m  |
| 7       | 15          | +10      | Rect . Sec . b =0.3 m  |
| 8       | 15          | -10      | Rect . Sec . b =0.3 m  |
| 9       | 2.9         | +2.5     | Rect . Sec . b =1 m  |
| 10      | 2.9         | -2.5     | Rect . Sec . b =1 m  |

2) Design the following R.C Sections as Water Sections :

| Sec No. | M ( ton. m) | N ( ton) | Shape Of Section   |
|---------|-------------|----------|--|
| 1       | 0.0         | +40      | Rect . Sec . b =1 m  |
| 2       | 0.0         | -40      | Square Sec .   |
| 3       | 6           | 0.0      | Rect . Sec . b =1 m  |
| 4       | 3           | +5.2     | Rect . Sec . b =1 m  |
| 5       | 6.25        | +10.3    | Rect . Sec . b =1 m  |
| 6       | 6.25        | -10.3    | Rect . Sec . b =1 m  |
| 7       | 6           | +8       | Rect . Sec . 1.0 * 0.3 m  |
| 8       | 3           | +1       | L. Sec                     |
| 9       | 13.8        | 0.0      | T. Sec                    |

$F_{cu} = 250 \text{ kg/cm}^2$ , St . 36/52 , working loads