



## Assignment (1)

### Layout and Loads

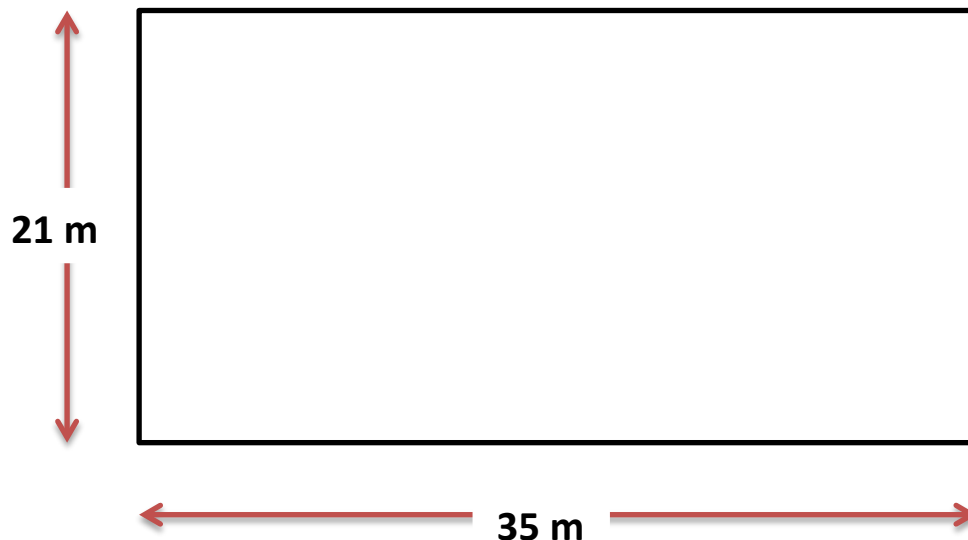
P.1

A factory is to be constructed on area (21m x 35m), it is required:

Draw the layout showing the main element arrangement [main trusses, purlins, and all bracing system].

#### Given:

- Height of frame is 8m (Clear height).
- Slope of roof is ( 5 : 1 ).





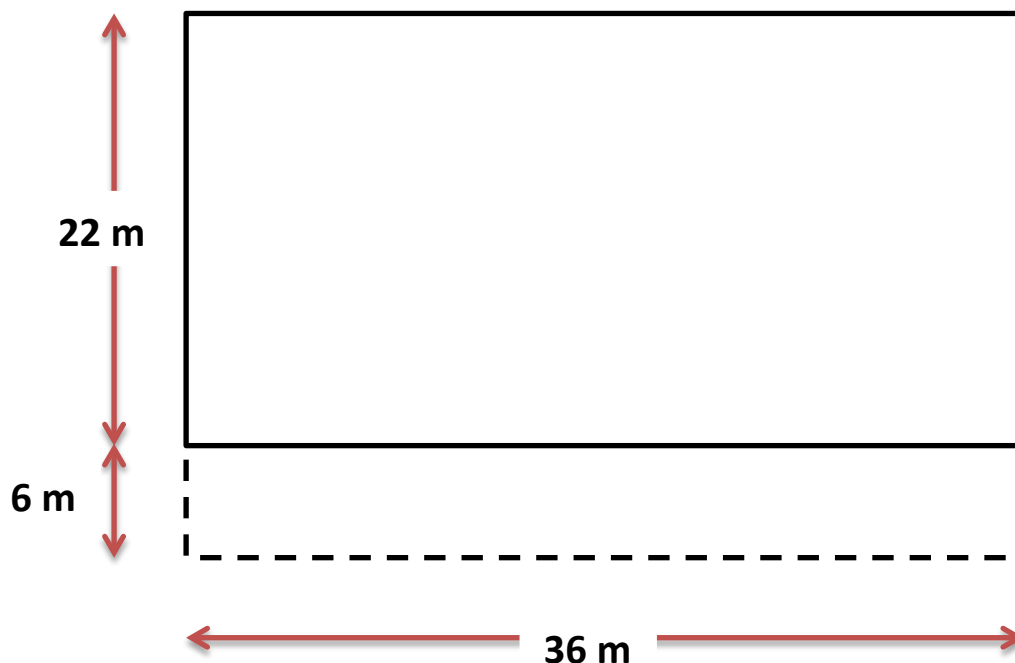
P.2

A factory building of area (22m x 36m) and a car shed of area (6m x 36m) are to be constructed as shown in the figure. The main system of the building is made up of steel trusses. Steel columns are provided along the solid lines only.

Draw the layout showing the main element arrangement [main trusses, purlins, and all bracing system].

Given:

- Height of frame is 9m (Clear height).
- Slope of roof is ( 10 : 1 ).





## Assignment (2)

### Loads

P.1

Calculate all the loads acting on the shown truss, knowing that the spacing between trusses = 6m.  
[Dead load, Live load, Wind load].

Where:

- Location is Cairo.

