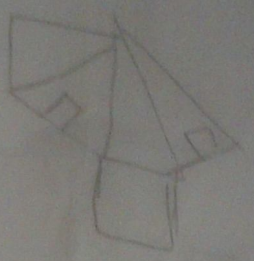
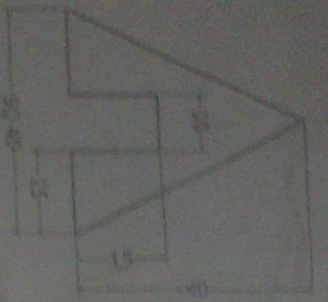


1. A square prism with edge length 40 mm and height 55 mm rests on its base in HP with its side faces equally inclined to VP. The prism contains a concentric axial hole of 25 mm diameter, drilled in it. This prism is cut by section plane perpendicular to VP inclined at 60° to HP and bisecting its axis. Draw the front view, sectional top view and sectional auxiliary view of the object on a plane parallel to the cutting plane. (10)

2. An square pyramid with base edge 40 mm and height 40 mm rests on ground with front view as shown. A rectangular groove cuts through the pyramid whose normal cross section is 10 mm x 15 mm. (Also see adjoining photograph) Draw the front, top view of the pyramid. Make the complete development of lateral surface as well as the base of the pyramid. (10)



3. There are many environmental related issues in India. Cleanliness is one of them. We can see trash lying everywhere. Here are some common findings.

- People are not putting trash in to dustbin.
- Throwing trash anywhere in the corner or on a ground.
- Dustbin is a non-attractive and most neglected part of our life.
- People are lazy to put trash in dustbin.

Taking all these points in account, design a new innovative dustbin which will inspire people to put trash in to it, keeping environment clean and healthy.

- 1) Forward Sketching = 4 marks
- 2) Innovative Concepts = 4 marks (8)
4. For the component shown in the adjoining figure, draw the following as per third angle projection. (a) Front View, right half in section (b) Side View with full in section. Dimension the views as per angles given. (12)

