

BA SANGAM COLLEGE

YEAR 10

BASIC TECHNOLOGY

WORKSHEET 4

TOPIC: FIRST ANGLE ORTHOGRAPHIC

2D DRAWINGS

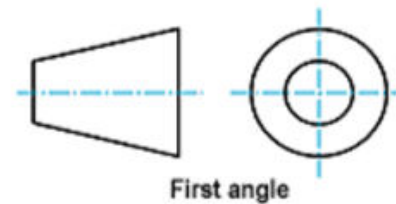
ORTHOGRAPHIC PROJECTION

Types of Orthographic Drawing (Projection)

1. First Angle Projection
2. Third Angle Projection

FIRST ANGLE ORTHOGRAPHIC PROJECTION

First angle projection is a method of creating two-dimensional (2D) drawings out of a three-dimensional (3D) object. The views are drawn as if a torch is shined on the object and a shadow is projected on the wall behind the object. This is important information for the layperson when interpreting drawings.



IMPORTANT POINTS TO NOTE:

- ALWAYS START DRAWING FROM MAIN ELEVATION
- MAIN ELEVATION IS ALSO KNOWN AS FRONT ELEVATION
- MAIN ELEVATION WILL BE ON TOP OF THE REFERENCE LINE
- PLAN WILL BE BELOW THE REFERENCE LINE
- FOR RIGHT END ELEVATION – LOOK FROM THE RIGHT SIDE AND DRAW ON THE LEFT SIDE OF MAIN ELEVATION
- FOR LEFT END ELEVATION – LOOK FROM THE LEFT SIDE AND DRAW ON THE RIGHT SIDE OF MAIN ELEVATION

EXERCISE 1

The faces on the orthographic view of a given multi-shaped block are indicated by letters in **Figure 2**.

Write the correct letters in the circles in **Figure 1** to match their corresponding faces in **Figure 2**.

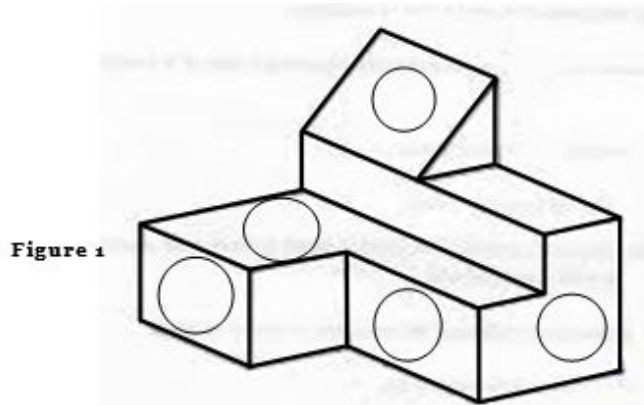


Figure 1

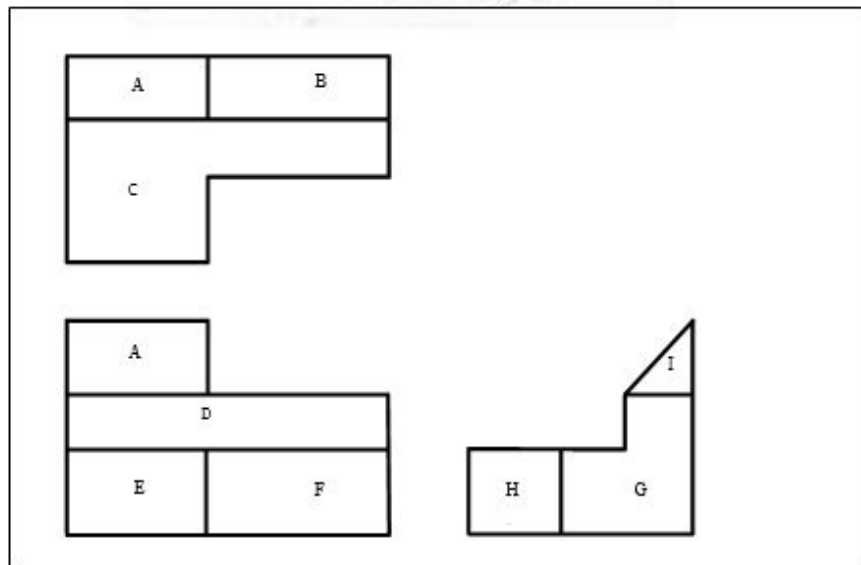
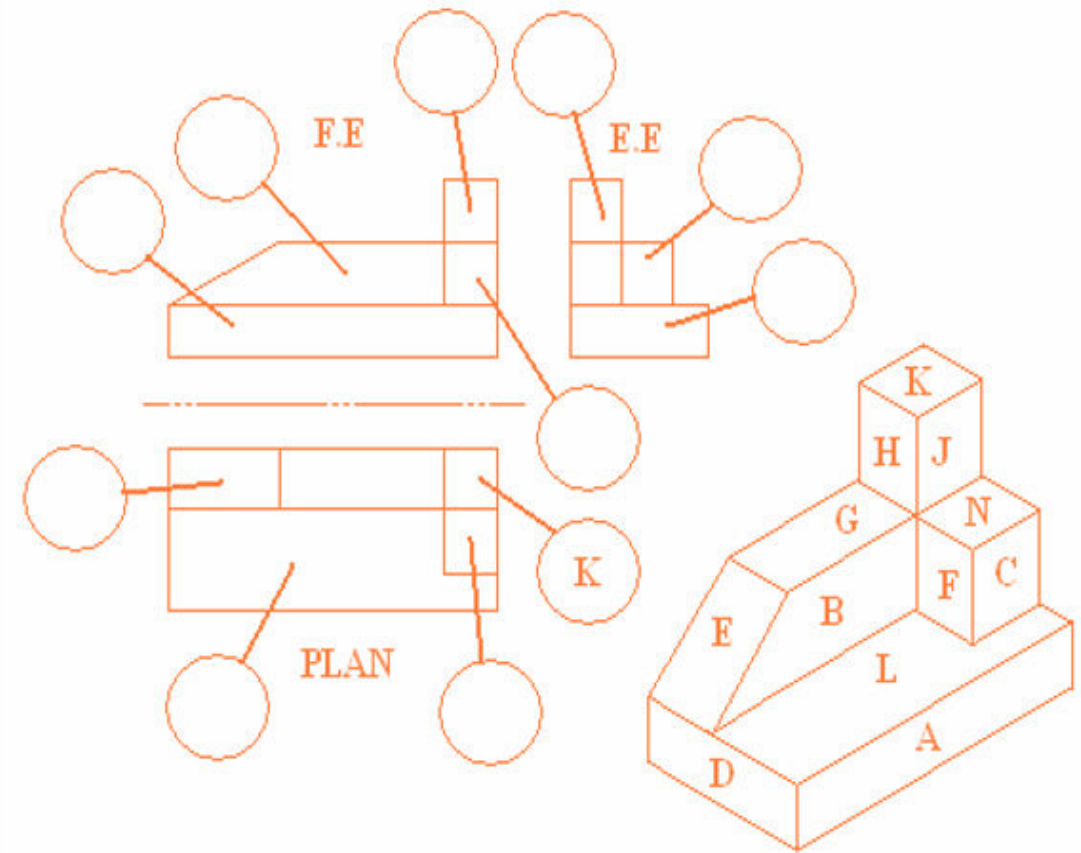


Figure 2

Sangam Education Board – Online Resources

EXERCISE 2

Write down the corresponding alphabets in the circles provided.



EXERCISE 1

GIVEN: The Pictorial view of a shaped block.

REQUIRED: Draw and label the Elevation, Plan and End Elevation using first angle orthographic projection. *Take measurements directly from the pictorial view.*

5	Accuracy - length, width	1	
6	Correct shape	2	
7	Correct line work	1	
8	Overall neatness	1	
END ELEVATION			
9	Accuracy - length, width	1	
10	Correct shape	2	
11	Correct line work	1	
12	Overall neatness	1	

