INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: SCIENCE	Date: 27/11/2022
MARKS: 70	ASSESSMENT - II ENGINEERING GRAPHICS (046) MARKING SCHEME	DURATION :3 hrs.

GENERAL INSTRUCTIONS:

(i) Attempt all the questions.

(ii) Use both sides of the drawing sheet, if necessary.

(iii) All dimensions are in millimetres.

(iv) Missing and mismatching dimensions, if any, may be suitably assumed.

(v) Follow the SP: 46 – 2003 revised codes. (with first angle method of projection)

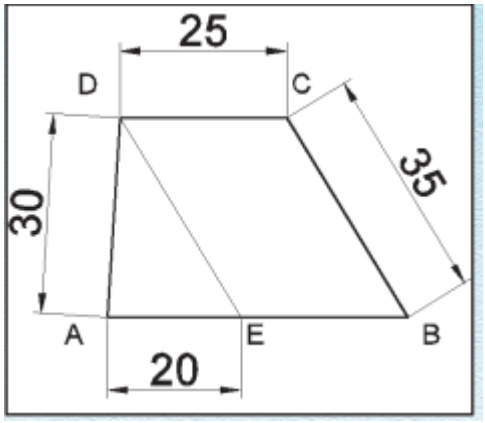
SECTION – A

1	2	3	4	5
a	b	c	d	a
6	7	8	9	10
c	a	b	c	b
11	12	13	14	15
c	a	d	a	d
16	17	18	19	20
b	d	a	c	a

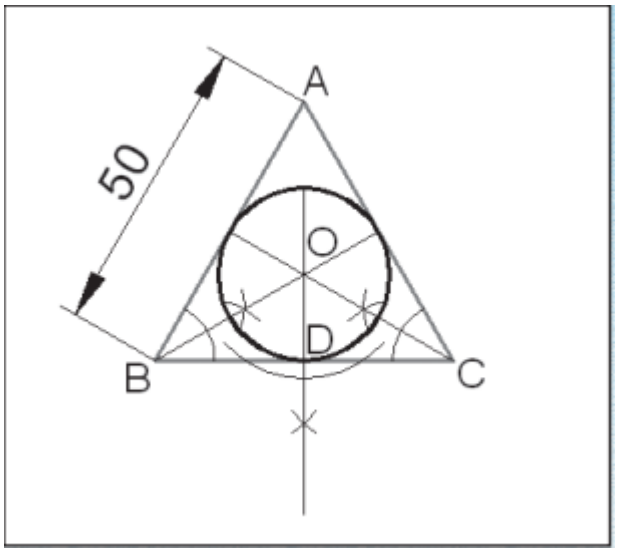
SECTION – B

3 X 2 = 6

21. Construct a trapezium ABCD, having its sides AD = 30 mm, DC = 25 mm, CB = 35 mm and the difference of parallel sides is 20 mm.

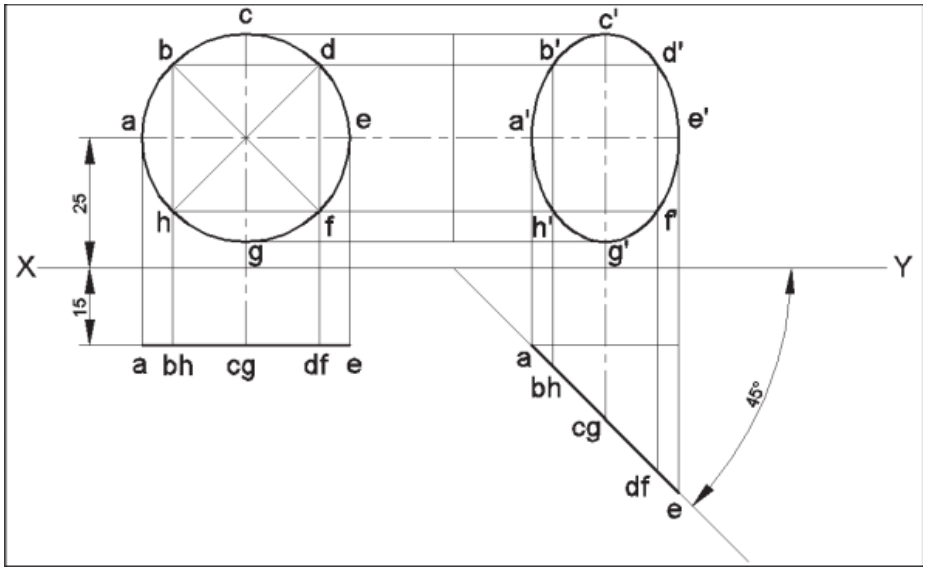


22. Draw the given equilateral triangle of side = 50 mm. Inscribe a circle in it.

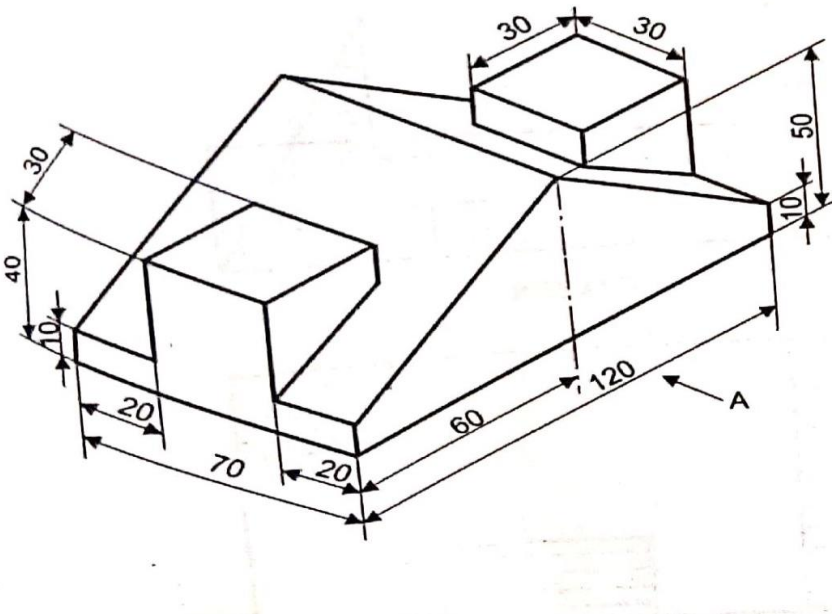


5 X 2 = 10

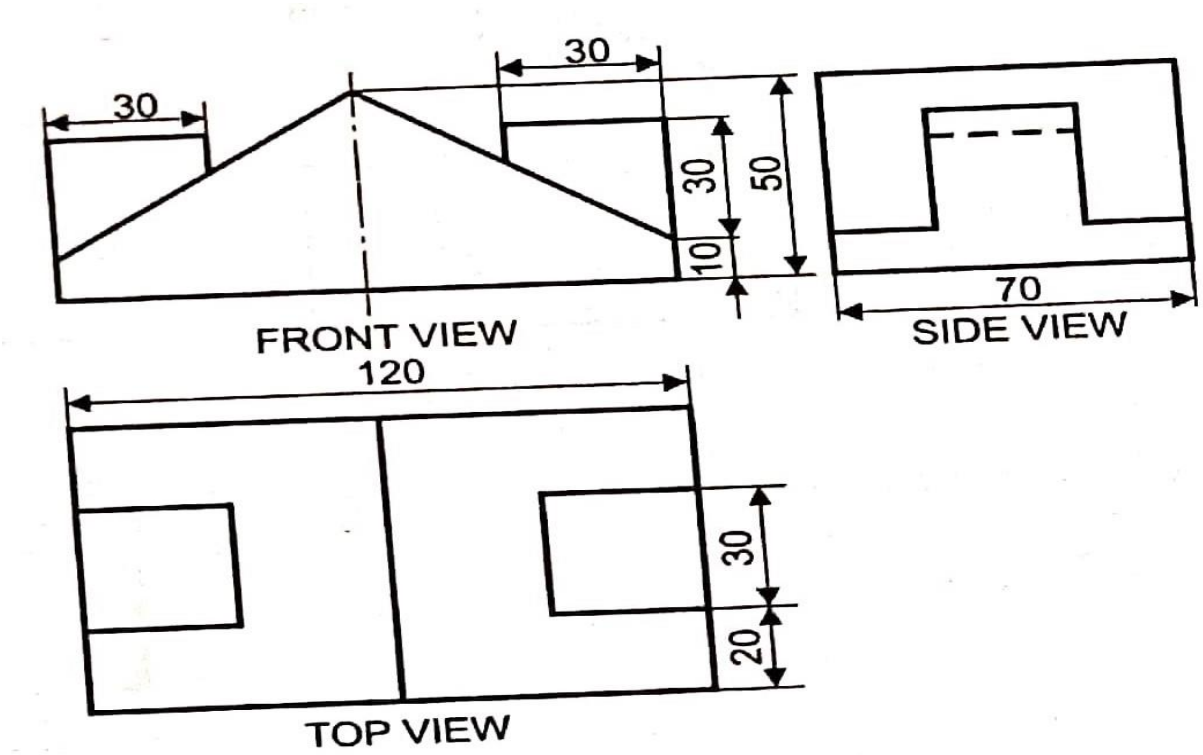
23. Draw the projections of a circular lamina of 30 mm diameter. The lamina is inclined at an angle of 45 degree to V.P.



24. Project front view, side view and top view of the machine block, to scale 1:1

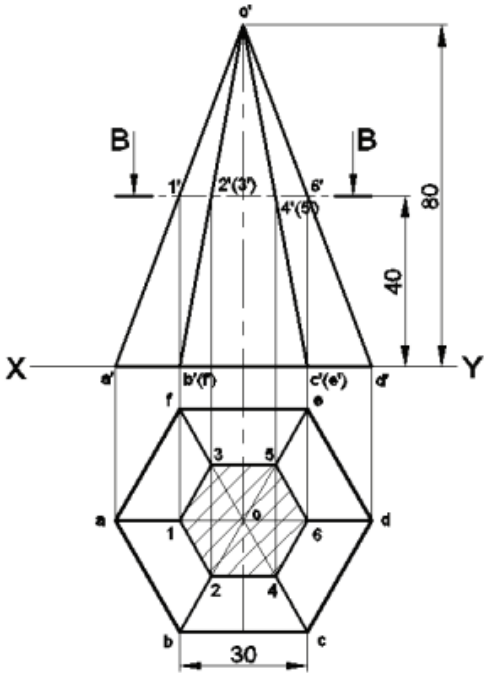


SOLUTION:



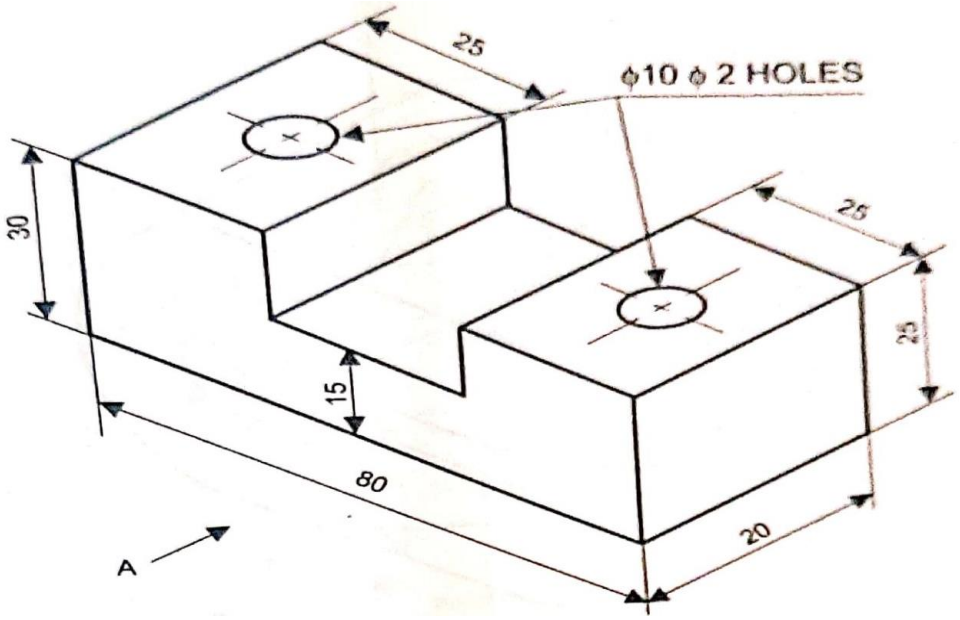
7 x 2 = 14

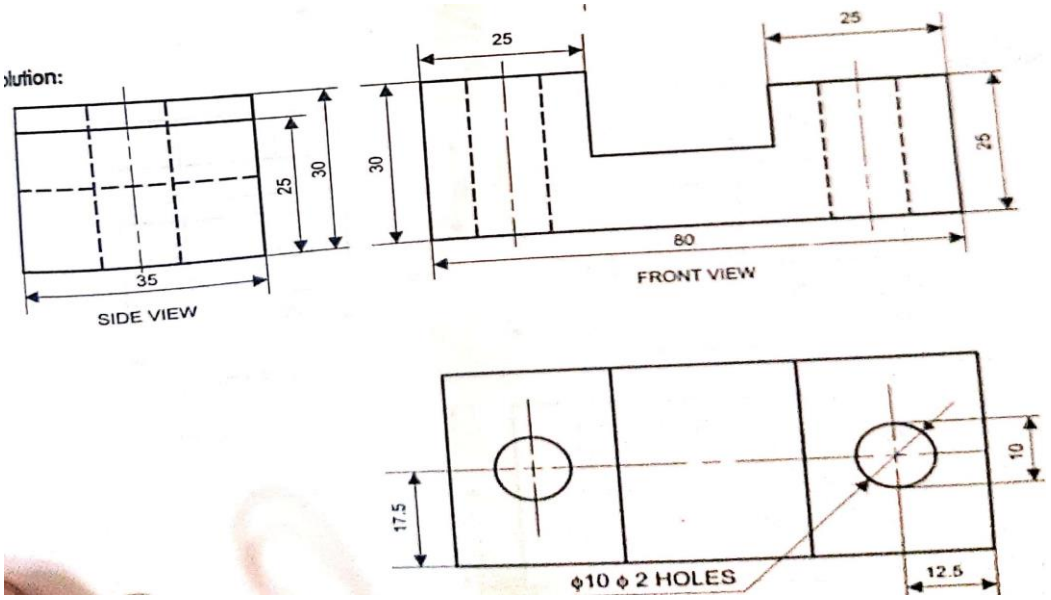
25**.** A hexagonal pyramid is resting on its base on the ground with base side equal to 30 mm and axis length is 80 mm. A horizontal section plane, bisects the 80 mm long axis. The axis is perpendicular to H.P. Draw the Front View and sectional Top View.



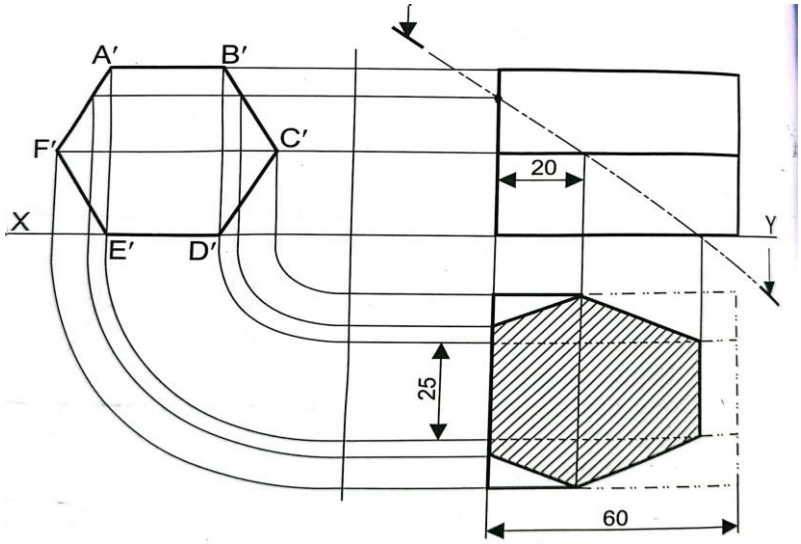
10 X 2 = 20

26. Project front view, side view and top view of the machine block, to scale 1:1





27.A hexagonal prism of 25 mm base edges and 60 mm length is resting on one of its rectangular faces on the HP with its hexagonal ends at right angles to VP. It is cut by an oblique plane inclined to HP towards the right and intersecting the axis at a point 20 mm away from one of its ends. Project its front view and Sectional top view.



28. A pentagonal prism having a 20 mm edge of its base and an axis of 50 mm length is resting on one of its rectangular faces with its axis parallel to both HP and VP. Draw the projections of the prism.