



Indian School Al Wadi Al Kabir

Assessment– II

Class: XI
Date: 05/12/24

ENGINEERING GRAPHICS (046)
Marking Scheme

Max. marks: 70
Time: 3 hours

General Instructions:

- (i) Attempt all the questions.
- (ii) Use both sides of the drawing sheet, if necessary.
- (iii) All dimensions are in millimeters.
- (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)

20 × 1 = 20

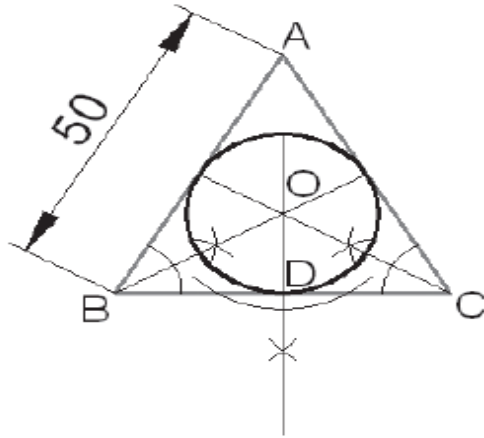
SECTION – A

Q.NO	ANSWERS
1	(b) Right side of front view
2	(d) Square
3	(b) First quadrant
4	(c) Side view
5	(c) Hexagon
6	(d)
7	(c) section plane

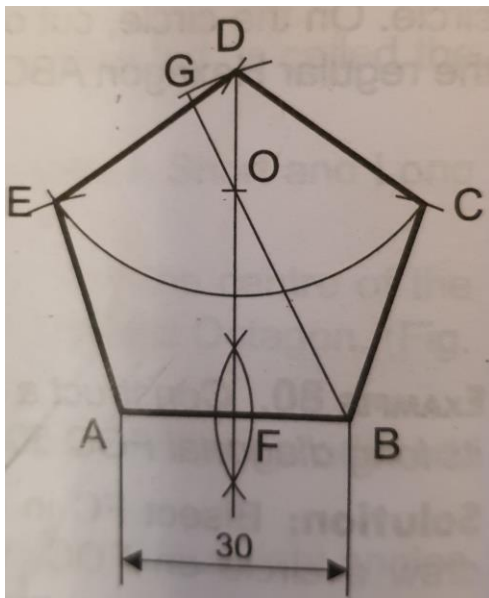
8	(c) Height
9	(d) Triangular prism and axis perpendicular to HP.
10	(a) 1-iv, 2-iii, 3-i, 4-ii
11	(a)
12	(c) (iii) only
13	(a) Right side view and represent at left side of front view.
14	(d) Continuous thick line
15	(c) Reference line/XY line
16	(b) above the xy line
17	(d) 100 mm
18	(b) 40
19	(a) left
20	(b) orthographic projection

SECTION B

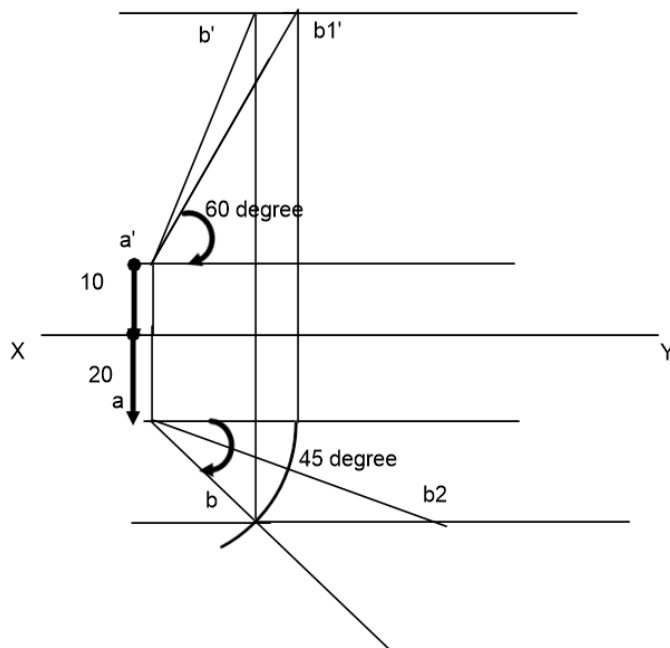
21. Draw the given equilateral triangle of side = 50 mm. Inscribe a circle in it.



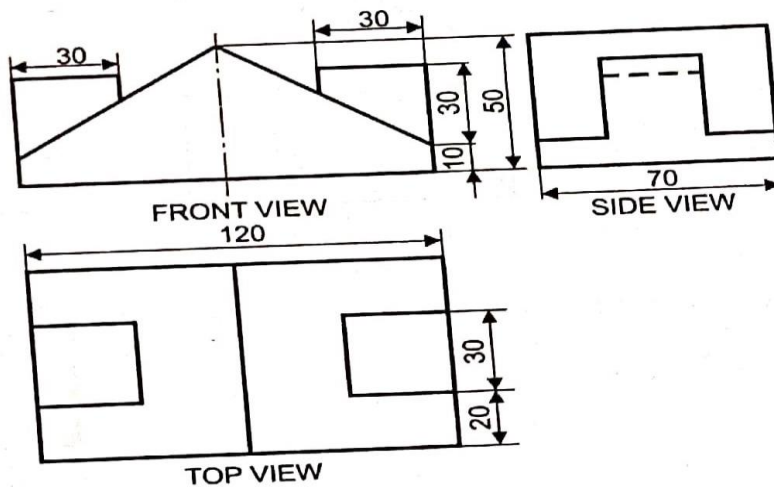
22. Construct a regular pentagon ABCDE of 30 mm sides using compasses.



23. A line AB, 75mm long makes an angle of 60 degree with the HP and its top view makes an angle of 45 degree with VP. Its end A is 10 mm above HP and 20 mm in front of VP. Draw its front view and top view using line rotation method.

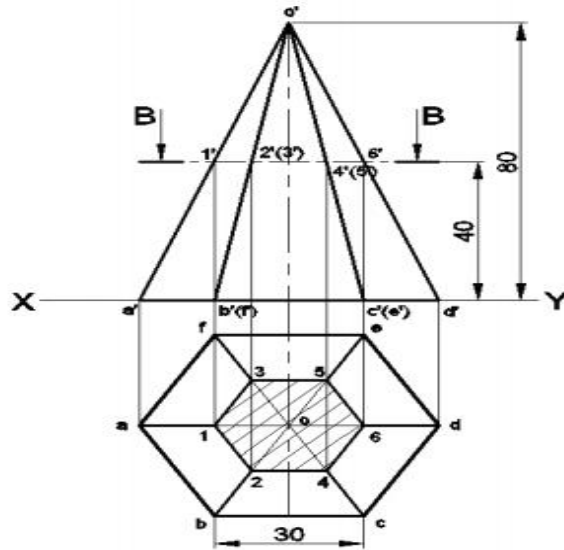


24. Project front view, side view and top view of the machine block, to scale 1:1.

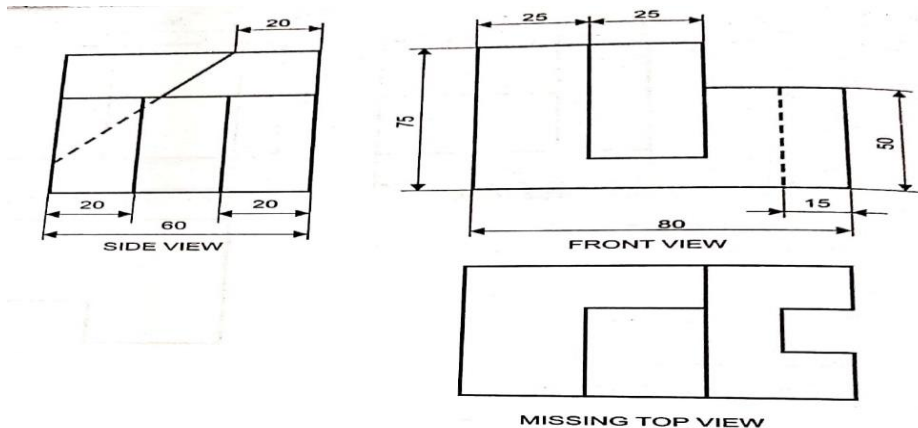


$$2 \times 7 = 14$$

25. A hexagonal pyramid is resting on its base on the ground with two of its base edges of length 30 mm, parallel to HP. 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.

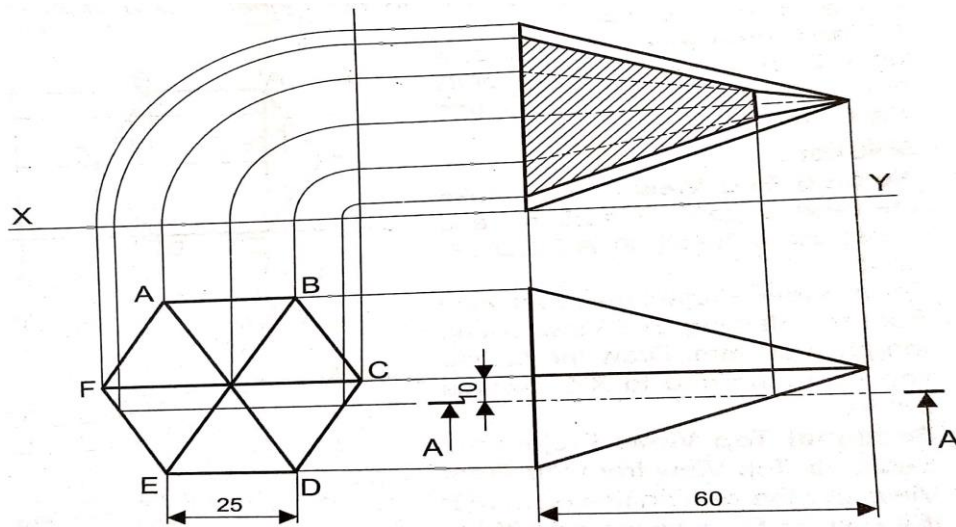


26. Project front view, side view and top view of the machine block, to scale 1:1.



$$2 \times 10 = 20$$

27. A hexagonal pyramid of 25 mm base edges and 60 mm long horizontal axis, is resting on one corner of its base, on HP with two opposite base edges parallel to VP (axis is parallel to both HP and VP). It is sectioned by a vertical plane parallel to VP and 10 mm away from its axis. Project its top view and sectional front view.



28. A hexagonal prism having a 30 mm edge of its base and an axis of 60 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.

