



INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: SCIENCE 2020 – 2021 SUBJECT: ENGINEERING GRAPHICS	Date of completion: 09.08.2020
Worksheet No:4 With Answers	Topic: <u>ORTHOGRAPHIC PROJECTION</u> <u>OF REGULAR SOLIDS</u>	Note: A4 FILE FORMAT
NAME OF THE STUDENT	CLASS: XI SECTION: C	ROLL NO.

Questions

1. A line AB 60 mm long has its end A 5 mm from HP and 25 mm from VP. The line is inclined to HP at 30 degree and parallel to VP. Draw its front view and top view in first quadrant.

2. A circle of 50 mm diameter is having its surface making 45 degree with HP and perpendicular to VP. Draw its front view and top view.

3. Draw the front view and top view of a square pyramid of 40 mm base edges and 50 mm height with its base resting on HP and two of its base sides parallel to VP.

4. The frustum of a cone of base diameter = 50 mm and sectioned face diameter = 25 mm and vertical axis = 30 mm is resting on its base. Draw its front view and top view.

5. A regular pentagonal prism, base side 30 mm and height 50 mm is resting on one of its rectangular faces on HP and its pentagonal ends perpendicular to HP and VP. Draw its front view and top view.

6. A cube of 40 mm edges is resting on one of its edges which is inclined to VP at 60 degree towards the right. Two of its faces are vertical and inclined to VP at 30 degree towards the left. Project its front view and top view.

7. Draw the front view and top view of a regular pentagonal pyramid of base edges 25 mm and axis 45 mm long resting on a corner of its base on HP, with a base edge on top parallel to HP. Its axis is horizontal and parallel to VP.

8. The frustum of a cone of 40 mm base diameter and 20 mm cut face diameter rests on HP with its axis 50 mm long, parallel to HP and inclined to VP at 30 degree towards right. Project its front view and top view when the cut face is in front.

MULTIPLE CHOICE QUESTIONS

1. Plan is the view from -----

- a) Top side
- b) Front side
- c) Bottom side
- d) Side view

2. Write the conditions for first quadrant

- a) Below HP and behind VP
- b) Above HP behind VP
- c) Above HP and in front of VP
- d) None of the above

3. Which one is known as full size scale

- a) Scale 1:1
- b) Isometric scale
- c) Scale 1:2
- d) Scale 5:1

4. A vertical line means a line :

- a) Perpendicular to VP

- b) Parallel to VP
- c) Perpendicular to HP
- d) Parallel to HP

5. A solid has

- a) 2 dimension
- b) 3 dimension
- c) 1 dimension
- d) None of the above

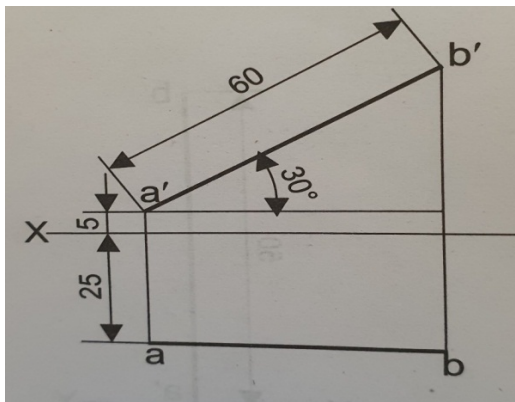
ANSWERS

MULTIPLE CHOICE QUESTIONS

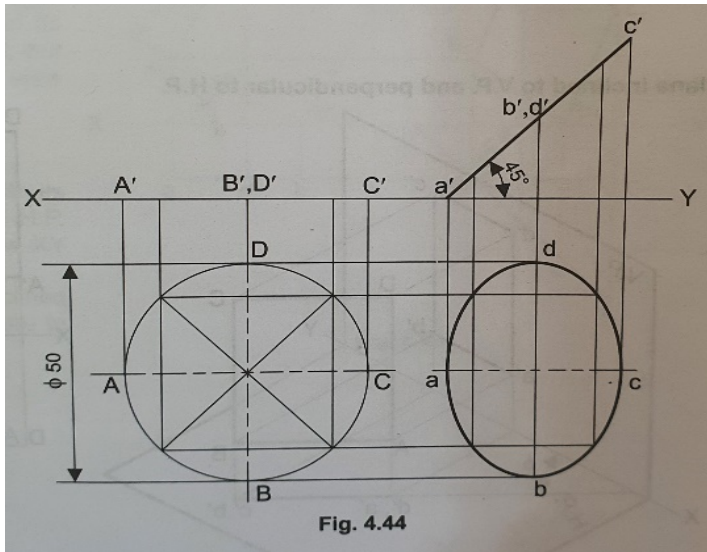
- 1. a) Top side
- 2. c) Above HP and Infront of VP
- 3. a) Scale 1:1
- 4. c) Perpendicular to HP
- 5. b) 3 dimension

SOLUTIONS FOR DRAWINGS

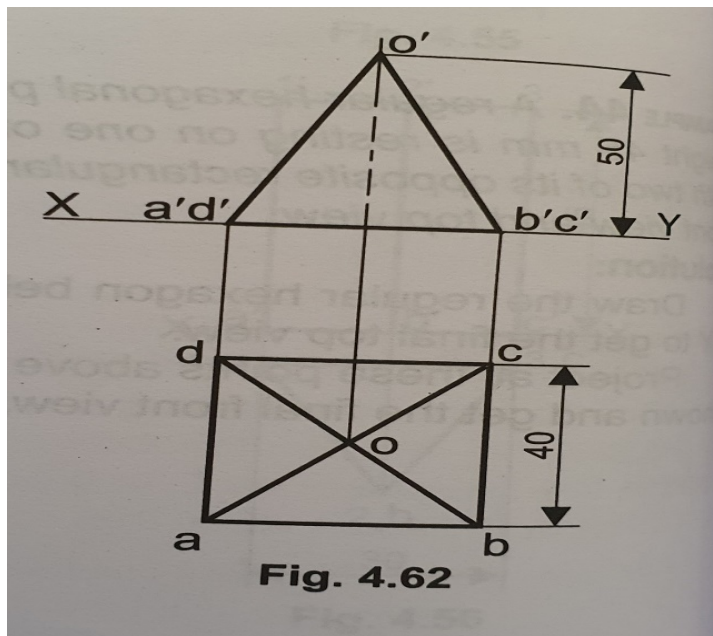
Q.1



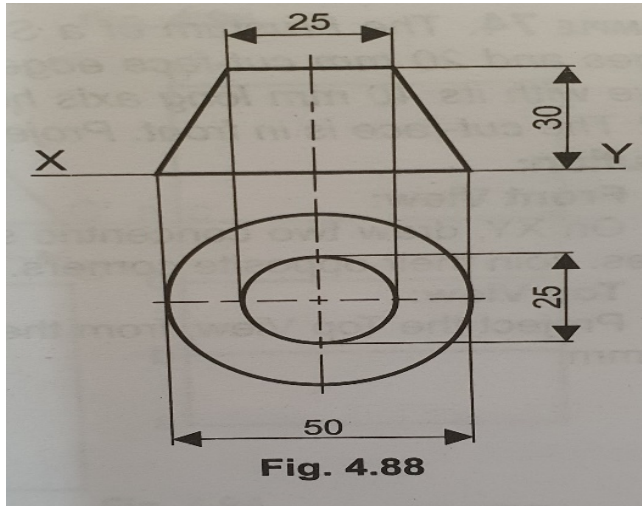
Q.2



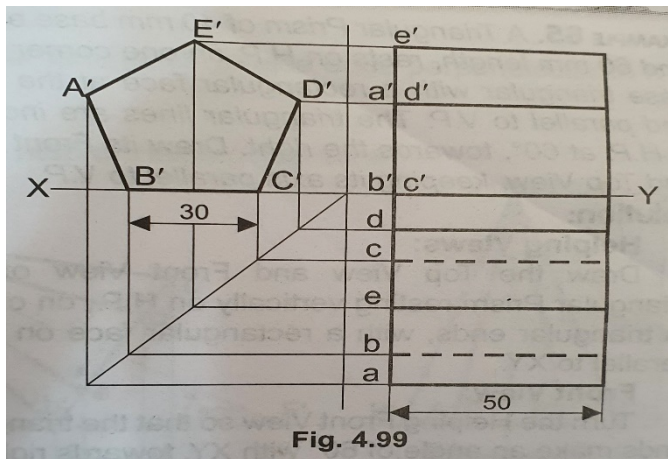
Q.3



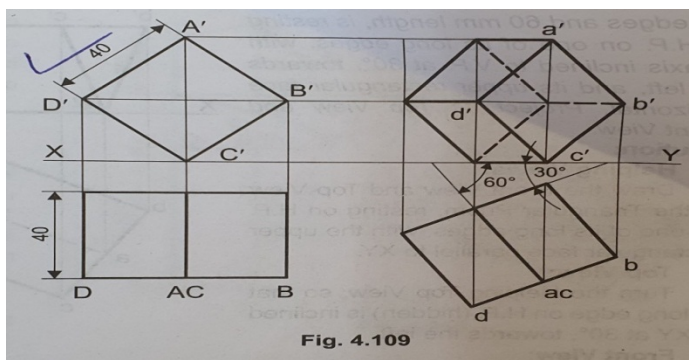
Q.4



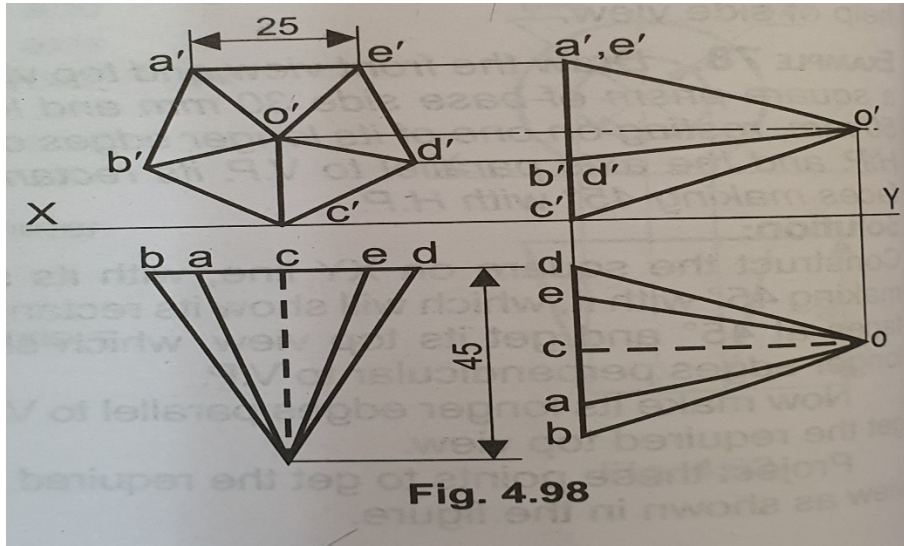
Q.5.



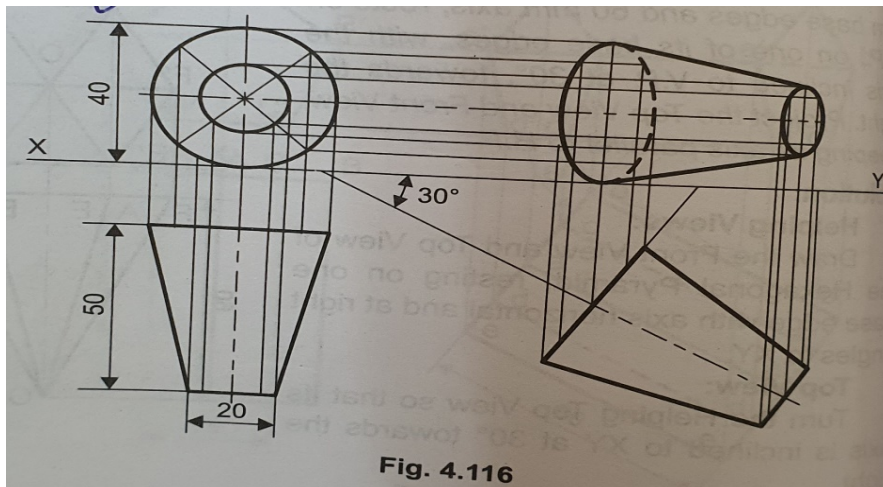
Q.6.



Q.7.



Q.8.



Prepared by: Ms. Aiswarya Deepthi.P

CHECKED BY : HOD - SCIENCE