SRM Institute of Science and Technology
College of Engineering and Technology
Department of Mechanical Engineering

18MES101L - Engineering Graphics and Design

Reg. No		**Ex. No**	6
Name of the student		**Week. No**	7
Department		**Title of the exercise**	**Projection of Solids - 2**
Section		**Date**	

Regular class problems

1. Draw the projections of the cylinder diameter 50 mm and axis length 80 mm when it is lying on the ground with its axis inclined at 45° to the wall and parallel to the ground. Draw its top, front and isometric views **(2 Marks).**

2. Draw the front, top and right side views of a cone of base diameter 40 mm and altitude 45 mm when its base kept parallel to the wall **(2 Marks)**.

3. A pentagonal pyramid of base edge 25 mm and axis length 60 mm rests on one of its base edges on ground such that the highest base corner 20 mm above ground. Its axis is parallel to the wall. Draw its top, front and isometric views **(2 Marks)**.

4. Two equal spheres of diameter 30 mm resting on the ground touching each other. Draw their projections when i) the line joining their centers is parallel to the both the wall and the floor. ii) The line of the centers is parallel to the floor and inclined at 30^0 to the wall **(2 Marks)**.

Extra problems for practice

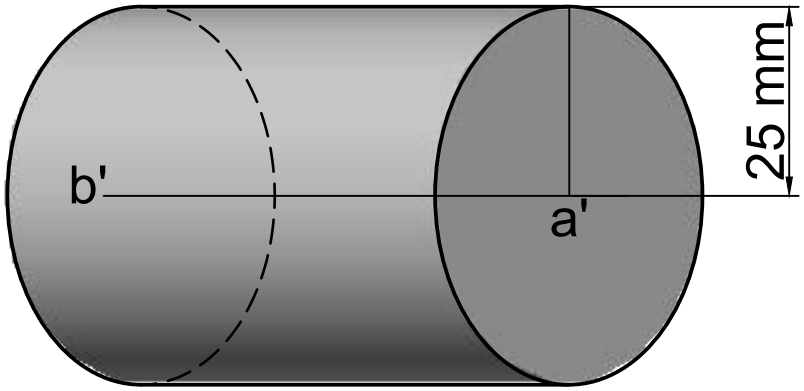
1. A hexagonal pyramid of base edge 40 mm and altitude 80 mm rests on one of its base edges on the floor with its axis inclined at 30^0 to the floor and parallel to the Wall. Draw its projections.

2. Draw the Projections of a right circular cylinder of base diameter 30 mm and the axis length 45 mm when its rests on wall on its base.

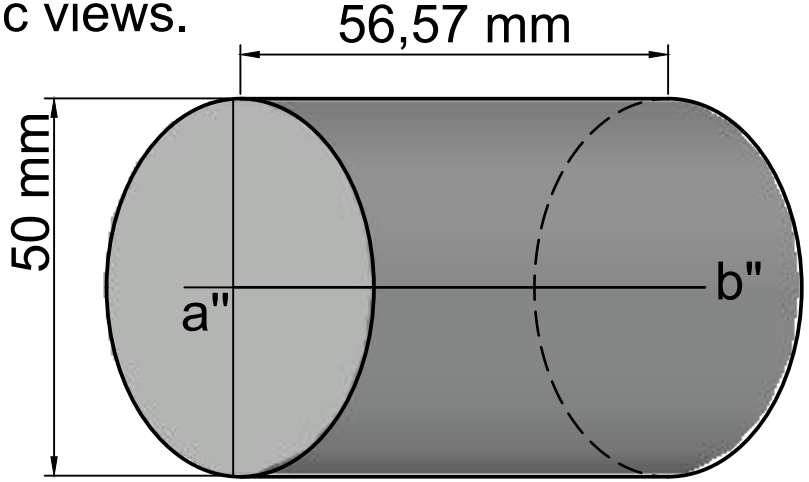
3. Draw the projection of torus diameter 40 mm resting on the ground. The tube radius of the torus is 5 mm.

4. Draw the torus diameter 40 mm resting on the ground. The tube radius of the torus is 5 mm. Sphere of diameter 20 mm is kept inside the torus and the axis of the both in same line and parallel to the wall.

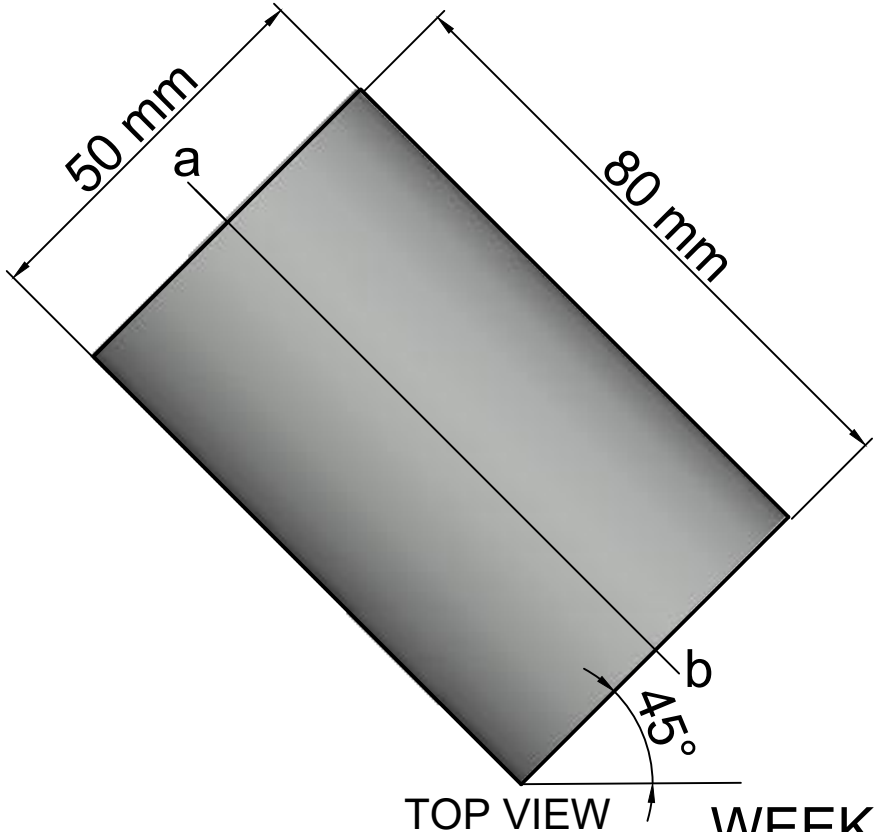
Q1: Draw the projections of the cylinder diameter 50 mm and axis length 80 mm when it is lying on the ground with its axis inclined at 45° to the wall and parallel to the ground. Draw its top, front and isometric views.



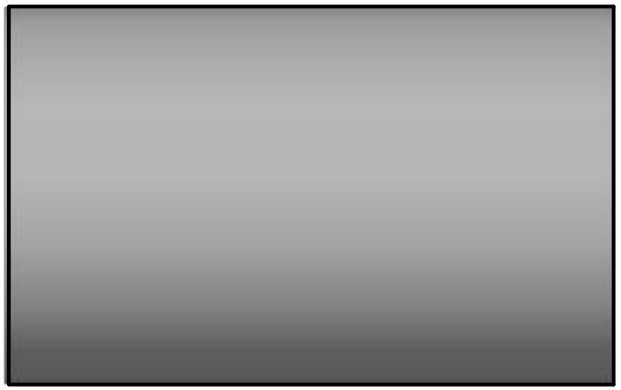
FRONT VIEW



SIDE VIEW



TOP VIEW



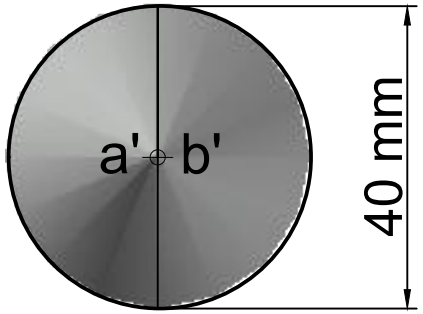
ISOMETRIC VIEW

[All Dimensions are in mm]

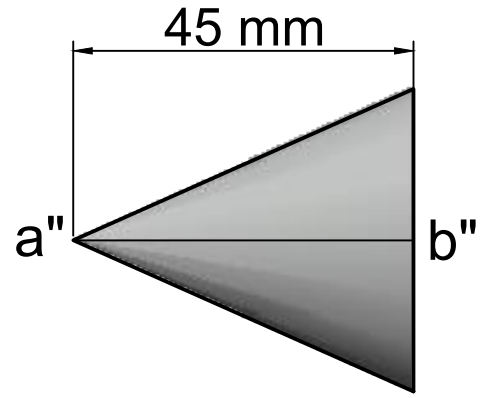
PROJECTION OF SOLIDS - II		
REG NO:	RA2011026010022	EX NO: 06
NAME :	DEBARGHYA BARIK	DATE:13.11.20
DEPT :	ENGINEER GRAPHICS	SCALE : 1:1
MARKS :		
FACULTY :	SARAVANAKUMAR R	

WEEK 6 Assignments

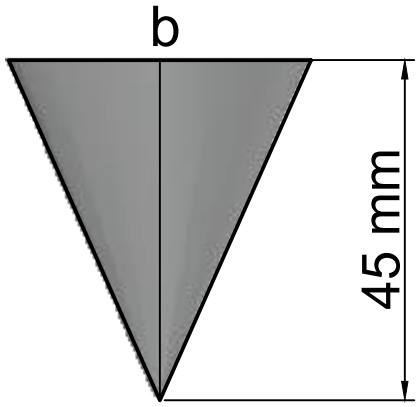
Q2: Draw the front, top and right side views of a cone of base diameter 40 mm and altitude 45 mm when its base kept parallel to the wall.



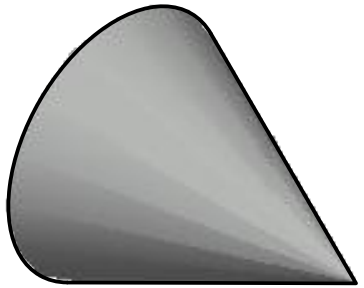
FRONT VIEW



RIGHT SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

[All Dimensions are in mm]

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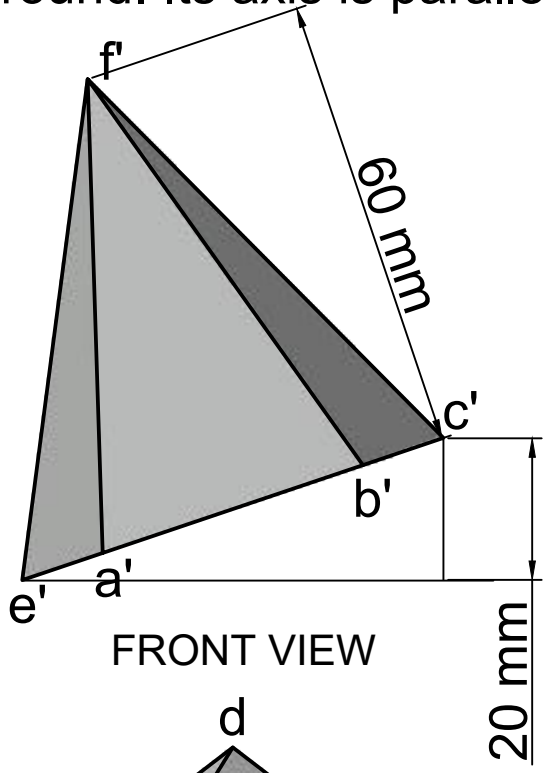
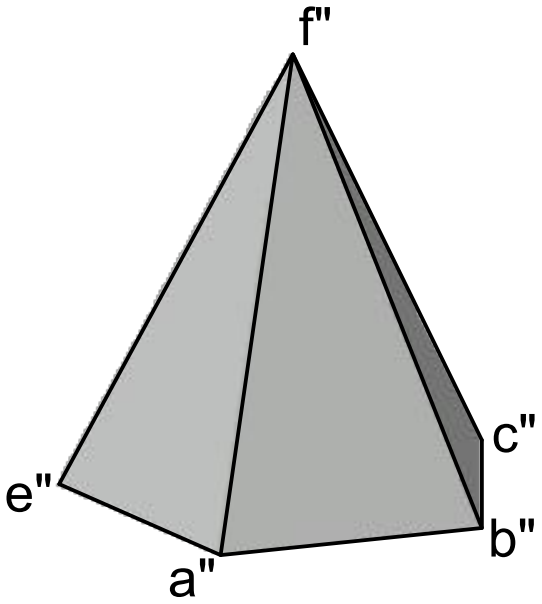
MARKS :		
FACULTY :	SARAVANAKUMAR R	

WEEK 6 Assignments

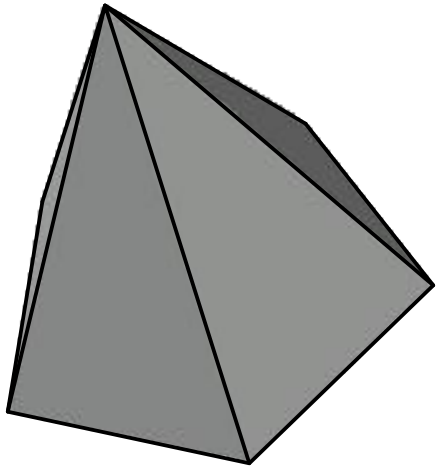
Q3: A pentagonal pyramid of base edge 25 mm and axis length 60 mm rests on one of its base edges on ground such that the highest base corner 20 mm above ground. Its axis is parallel to the wall. Draw its top, front and isometric views.



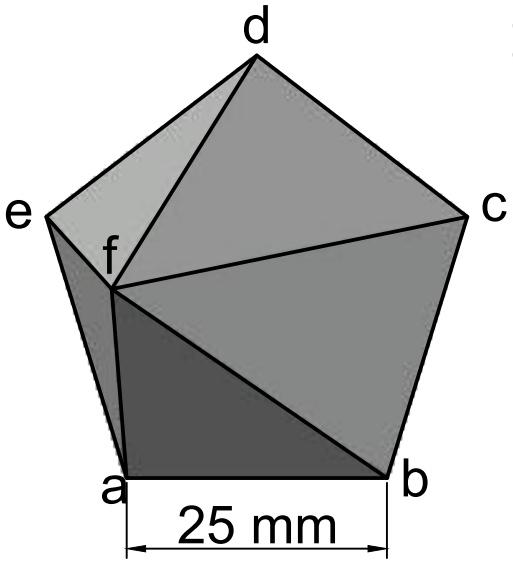
FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW



TOP VIEW

[All Dimensions are in mm]

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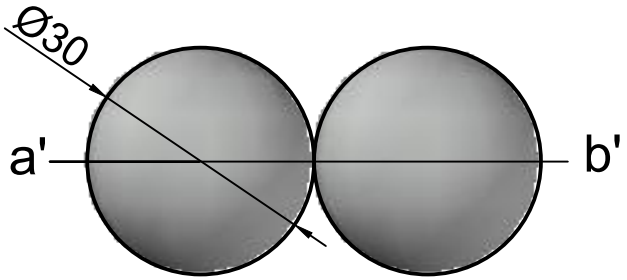
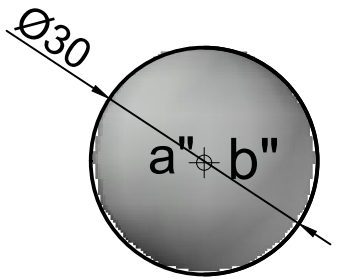
MARKS :		
FACULTY :	SARAVANAKUMAR R	

WEEK 6 Assignments

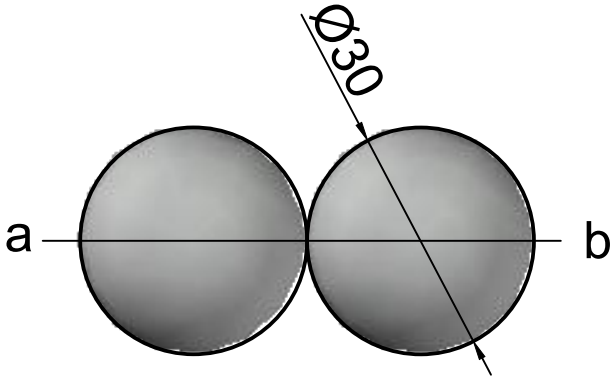
Q4: (i) Two equal spheres of diameter 30 mm resting on the ground touching each other. Draw their projections when the line joining their centers is parallel to the both the wall and the floor.



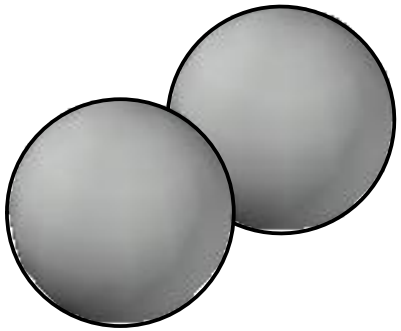
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

[All Dimensions are in mm]

WEEK 6 Assignments

PROJECTION OF SOLIDS - II		
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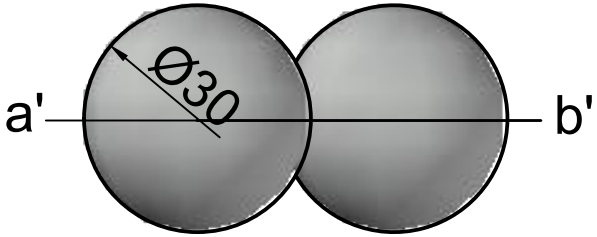
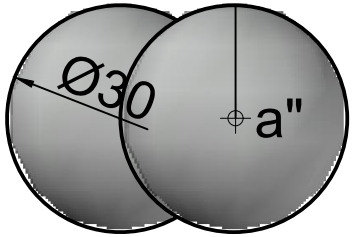
MARKS :		
FACULTY :	SARAVANAKUMAR R	

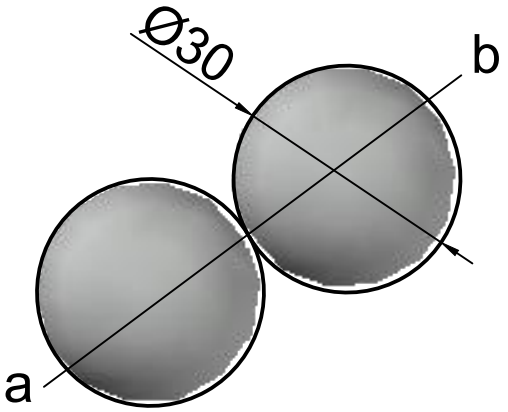
Q4: (ii) Two equal spheres of diameter 30 mm resting on the ground touching each other. Draw their projections when The line of the centers is parallel to the floor and inclined at 30 degrees to the wall



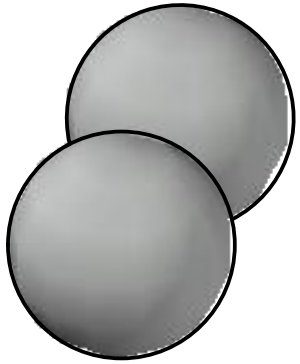
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

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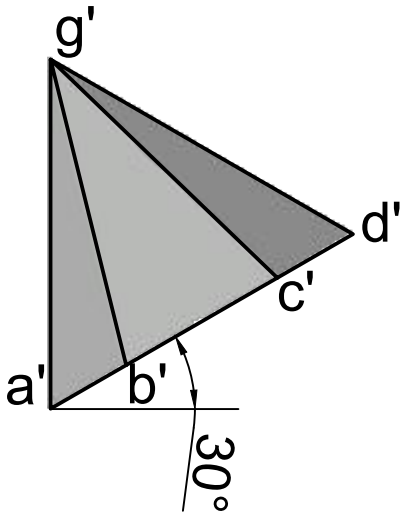
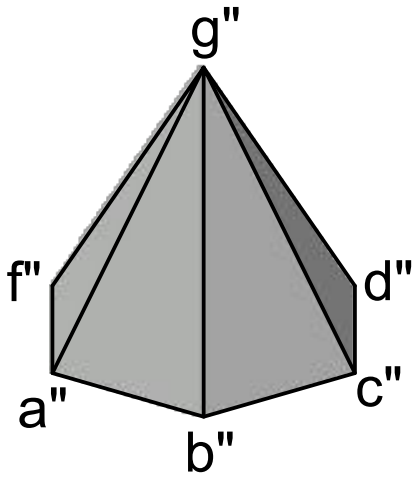
WEEK 6 Assignments

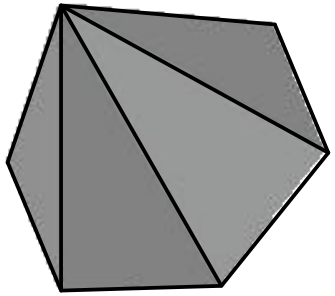
Q5:A hexagonal pyramid of base edge 40 mm and altitude 80 mm rests on one of its base edges on the floor with its axis inclined at 300 to the floor and parallel to the Wall.

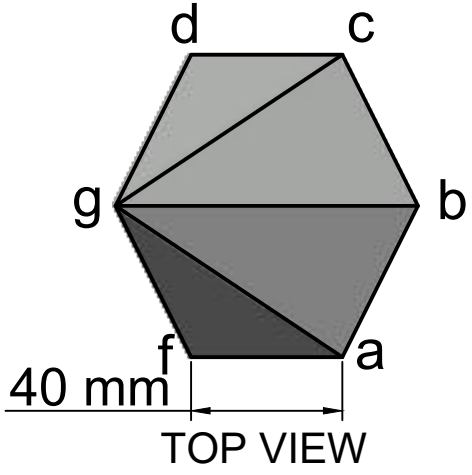


FRONT VIEW



SIDE VIEW


ISOMETRIC VIEW



TOP VIEW

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PROJECTION OF SOLIDS - II		
REG NO:	RA2011026010022	EX NO: 06
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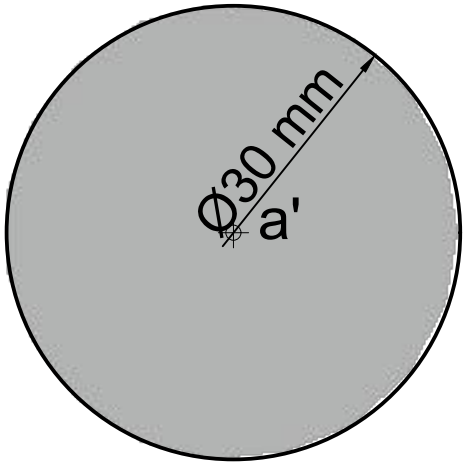
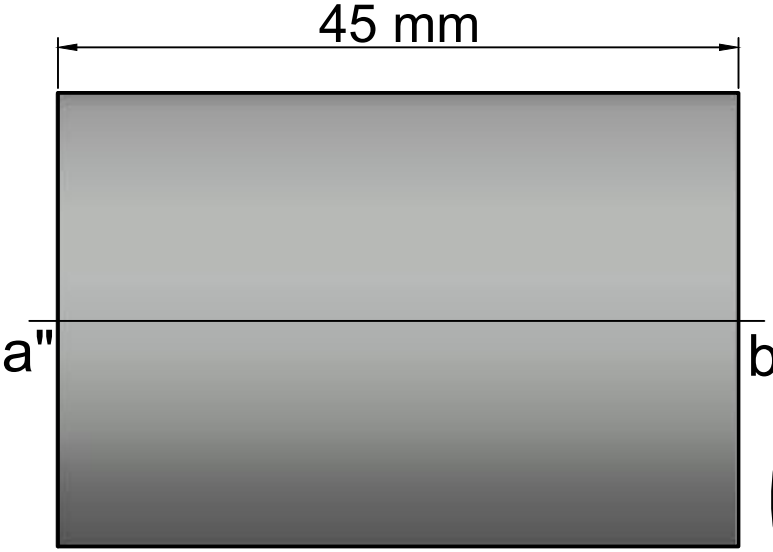
MARKS :		
FACULTY :	SARAVANAKUMAR R	

WEEK 6 Assignments

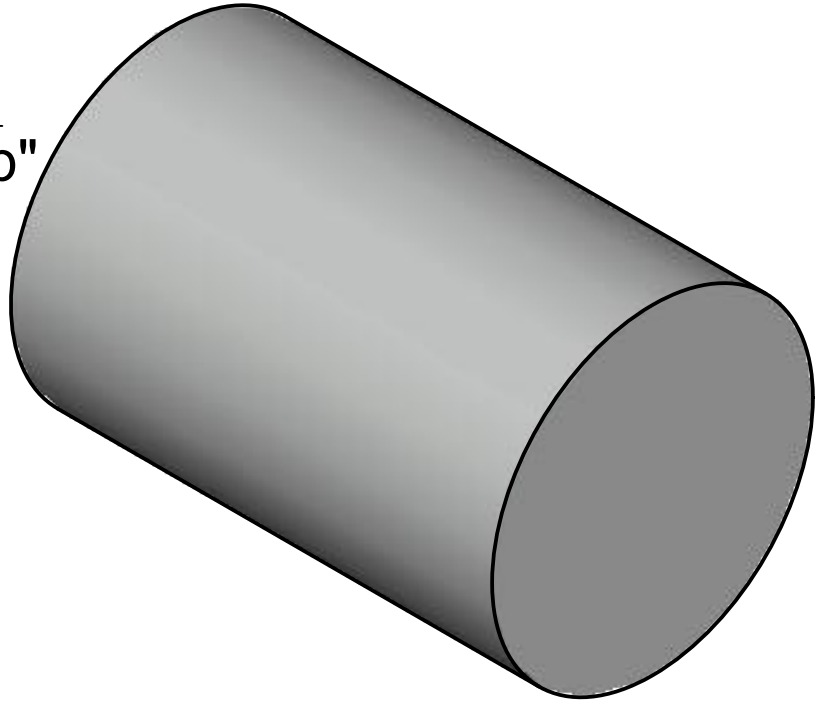
Q6: Draw the Projections of a right circular cylinder of base diameter 30 mm and the axis length 45 mm when its rests on wall on its base.



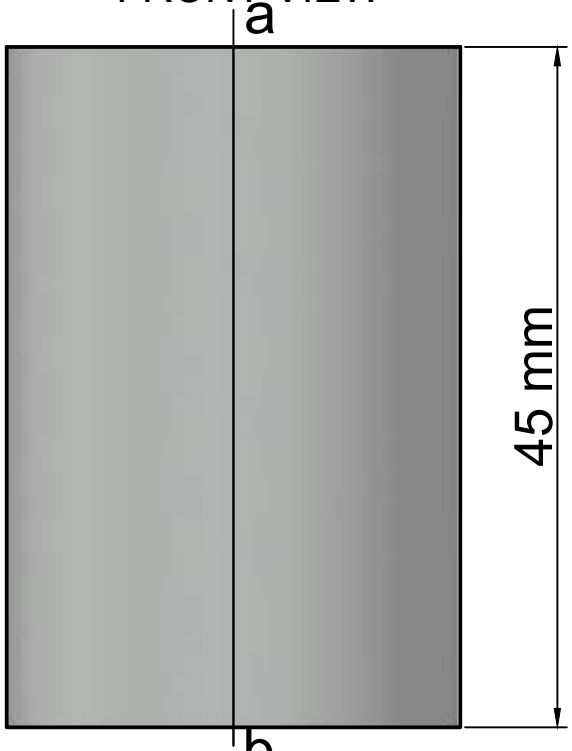
FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW



TOP VIEW

WEEK 6 Assignments

[All Dimensions are in mm]

PROJECTION OF SOLIDS - II		
REG NO:	RA2011026010022	EX NO: 06
NAME :	DEBARGHYA BARIK	DATE:13.11.20
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MARKS :		
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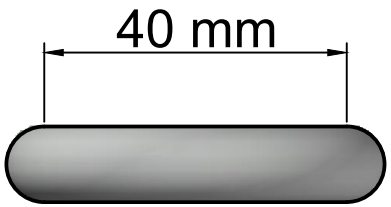
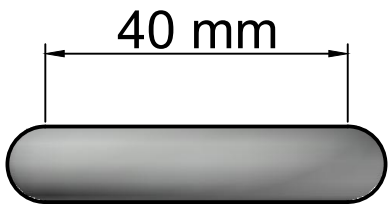
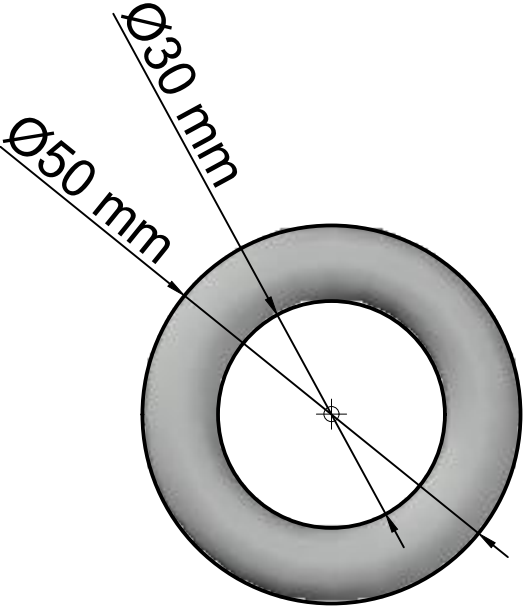
Q7: Draw the projection of torus diameter 40 mm resting on the ground. The tube radius of the torus is 5 mm.



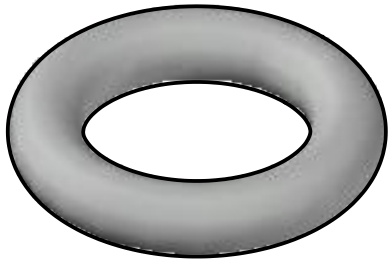
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

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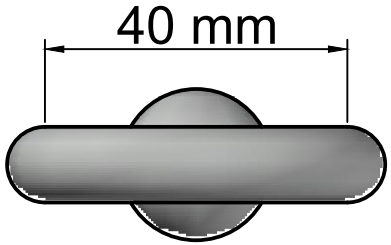
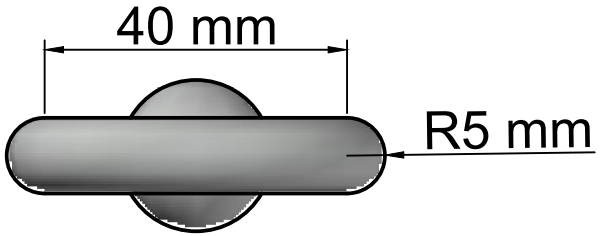
WEEK 6 Assignments

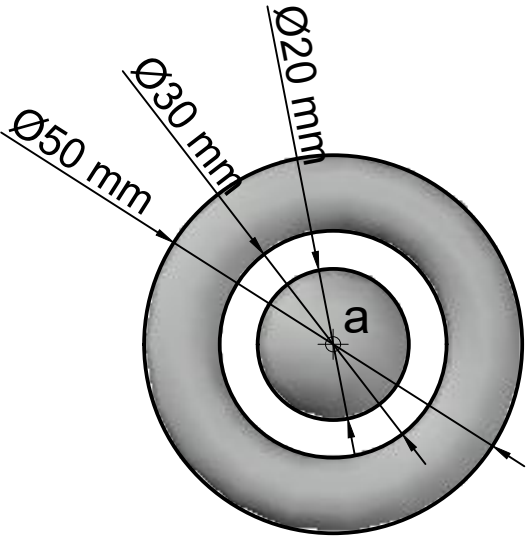
Q8:Draw the torus diameter 40 mm resting on the ground. The tube radius of the torus is 5 mm. Sphere of diameter 20 mm is kept inside the torus and the axis of the both in same line and parallel to the wall.



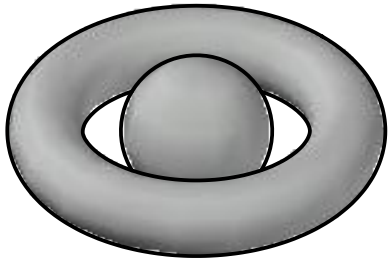
FRONT VIEW



SIDE VIEW



TOP VIEW



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MARKS :		
FACULTY :	SARAVANAKUMAR R	

WEEK 6 Assignments