



LABORATORY WORK SHEET

Name of the Student : Roll Number :
Class : Btech CSE Semester : I
Course Code : Course Name : Engineering Graphics
Name of the Course Faculty : Faculty ID :
Exercise Number : 7 a,b Week Number : 7 Date :

DAY TO DAY EVALUATION:

Marks	Aim / Preparation	Algorithm / Procedure	Source Code	Program Execution	Viva - Voce	Total
		Performance in the Lab	Calculations and Graphs	Results and Error Analysis		
Max. Marks	4	4	4	4	4	20
Obtained	3	4	4	4	4	19

Signature of Faculty

START WRITING FROM HERE :

Methods of development

Parallel - line development

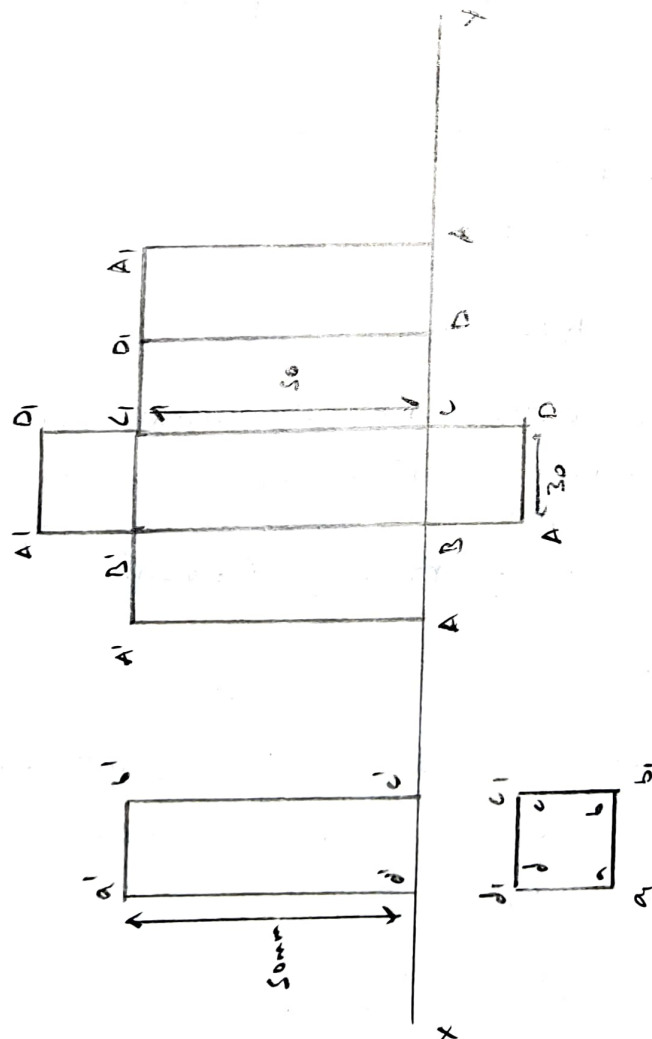
Aim: Draw the development of lateral surfaces of a right square prism of edge of base 30 mm and height 50 mm long.

Apparatus: Laptop, mouse, AutoCAD

Procedure:

1. Draw a line x and y as the points without any measurement.
2. Draw a square under the xy -plane by using the polygon command with the edge as 4.
3. Square prism of edge at the 4 sides taken as 30 mm.
4. Then extend the lines upto xy plane and then draw a line 50 mm from the xy plane vertically.

5. xy plane below is dimensioned as a, b, c, d then the 50mm line and make it as rectangle a net the points are $a'b'c'd'$.
6. Take any point of the xy plane and draw a 50mm height and 30mm edge rectangles.
7. There we should draw 4 rectangles with 50mm and 30mm and for the second rectangle opposite sides 30mm edge draw two squares.

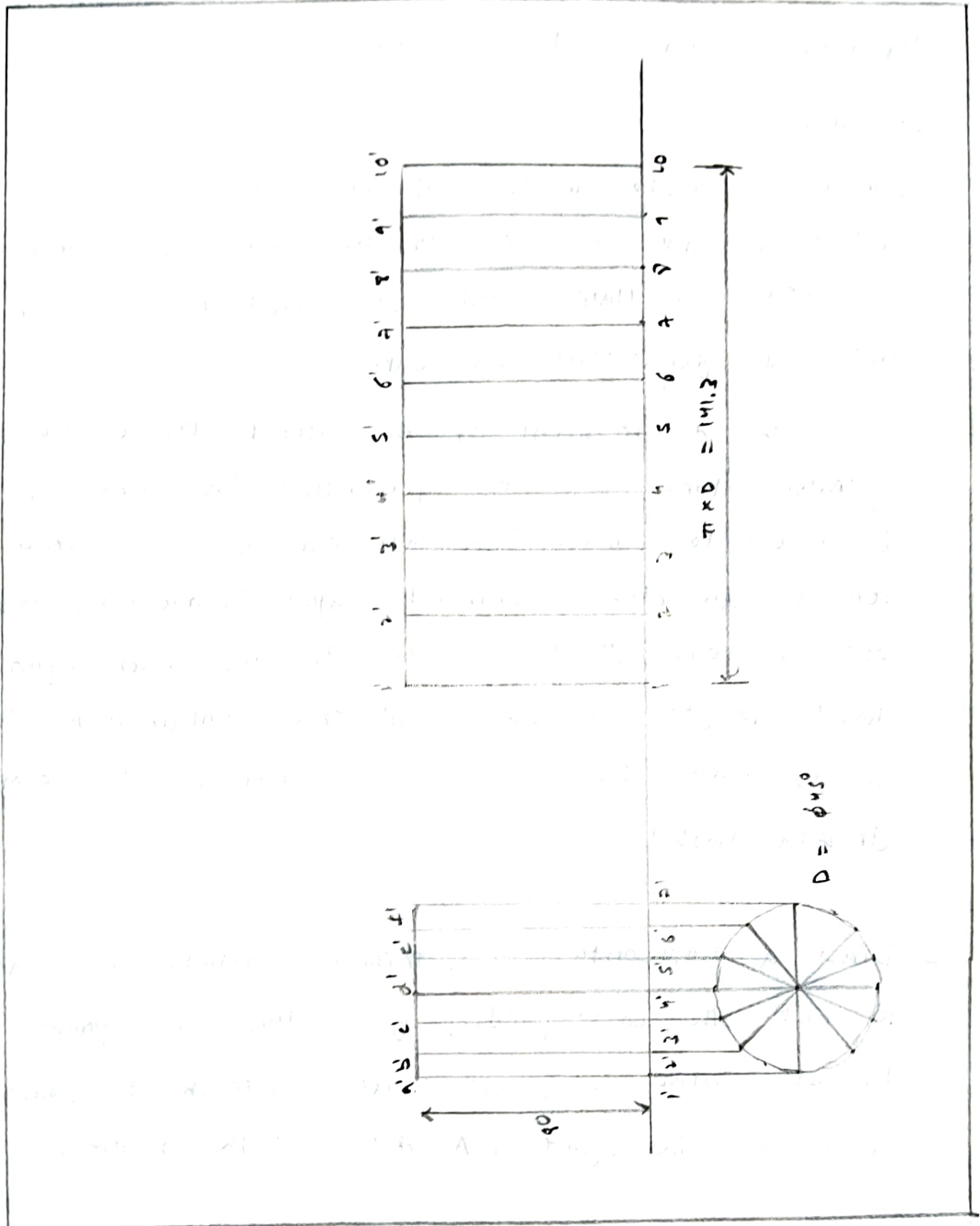


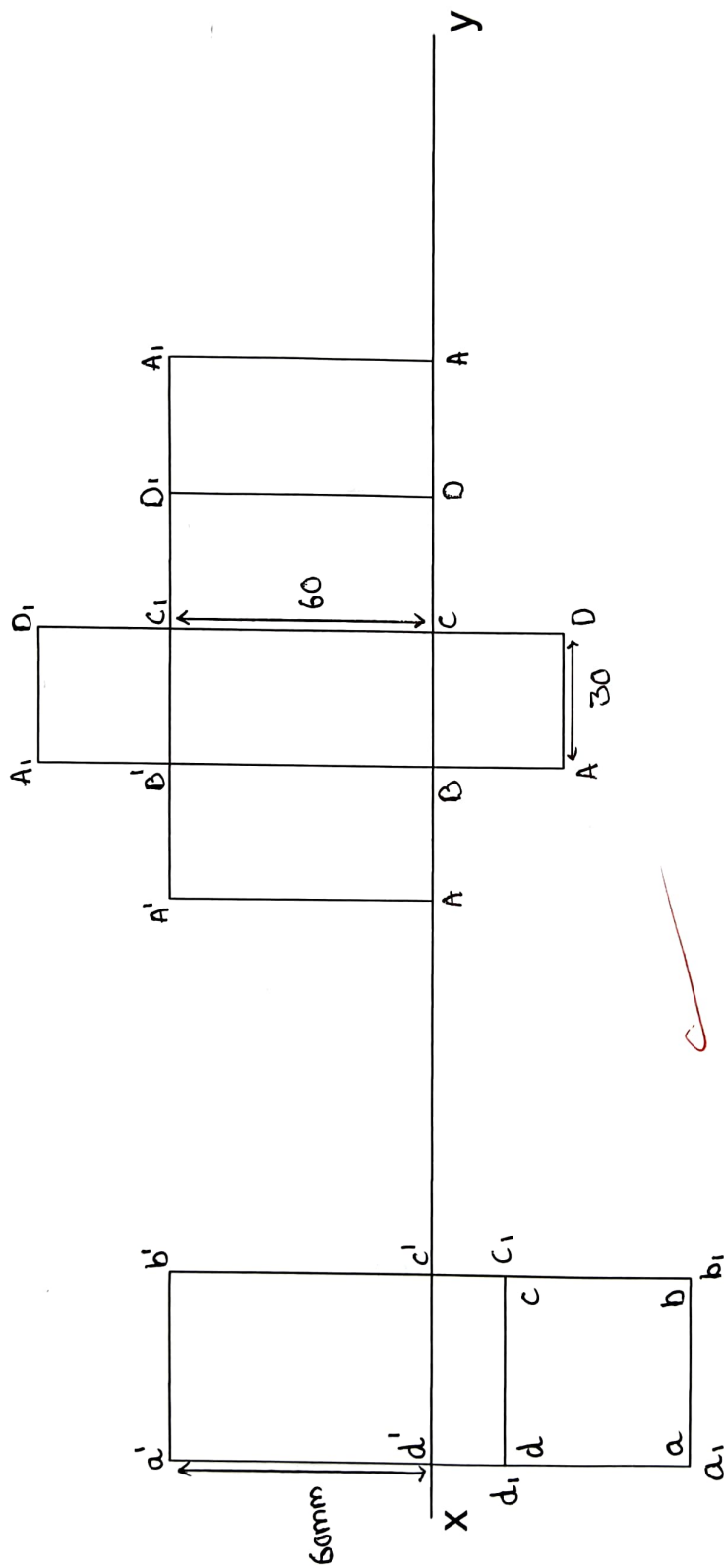
- b) Aim: Draw the development of the complete surface of a cylindrical drum, diameter is 49mm and height is 60mm.

Apparatus: Laptop, Mouse, AutoCAD.

Procedure:

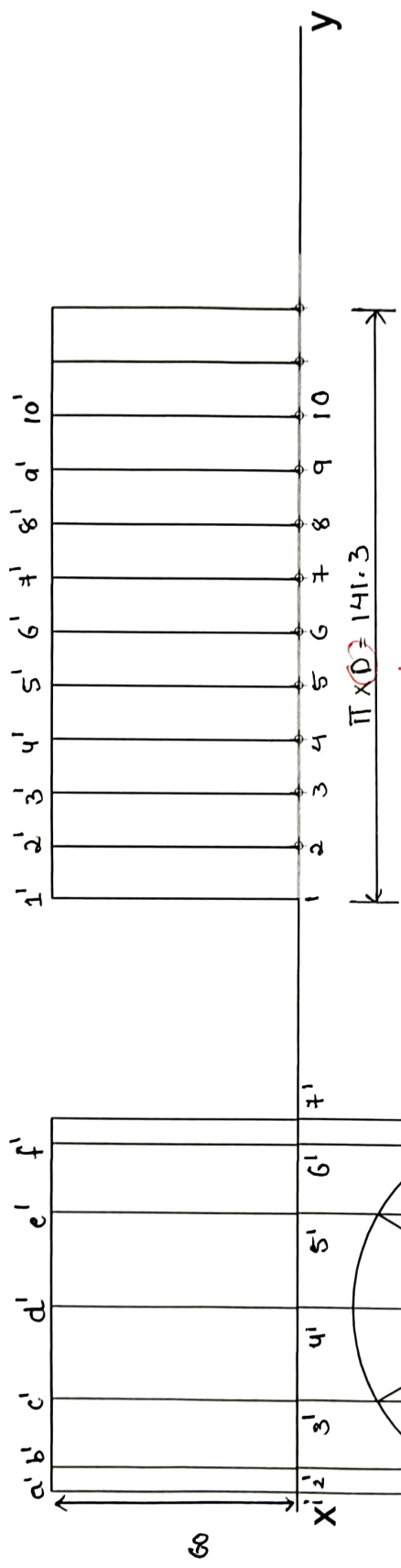
1. Divide the circle in the top view into twelve equal parts. Project the division points to the front view and then draw the generator. Mark point a', b' and b_1, c_1 and c_1 etc. in which the generators are cut.
2. Draw the development of the lateral surface of the whole cylinder along with the generators. The length of the line 1-1 is equal to $\pi \times D$ (Circumference of the circle). This length can also be determined approximately by stepping off with a bow divider twelve divisions, each equal to the chord length ab (The length thus obtained is about 1% shorter than the exact length; but this is permitted in drawing book).
3. Draw a horizontal line through points a', b' and b_1 etc. to cut the corresponding generators in points A, B and B_1 etc. Draw a smooth curve through the points thus obtained. The figure 1-A-A-1 is the required development.





✓ 3/2

Name:	safwan
Roll no:	23951A055F
Exp no:	7
Date:	13-12-2023



$D = \phi 45^\circ$

Handwritten signature and date 3/12

Name:	safwan
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Exp no:	7
Date:	13-12-2023