

MIT WORLD PEACE UNIVERSITY

Basics of Civil Engineering
First Year B. Tech, Trimester 3
Academic Year 2021-22

MEASUREMENT OF AREA OF AN IRREGULAR
FIGURE BY USE OF DIGITAL PLANIMETER

EXPERIMENT 6

Prepared By

109054. Krishnaraj Thadesar

Division 9 Batch I3

May 28, 2022

BCE EXPERIMENT - 6

(*) Aim: Using Digital Planimeter to measure area of any regular or irregular figure on paper.

(*) Instruments: Digital Planimeter

(*) Procedure:

- ① Fix the drawing paper
- ② Switch on the Planimeter
- ③ Select unit 1 i.e. cm^2
- ④ Select scale 1 : 1
- ⑤ Mark a point on the outer Periphery
- ⑥ Press start and start tracing the figure in clockwise direction
- ⑦ Divide Dig areas into 2-3 parts
- ⑧ Follow steps ⑥ and ⑦ again and measure the mean accuracy

(*) Observation Table:

Fig. No.	Repetition No.	Scale	Unit	Area	Average Area
1	i	1 : 1	cm^2	24.8	24.99
	ii	1 : 1	cm^2	25	
	iii	1 : 1	cm^2	25.1	
2	i	1 : 1	cm^2	235.4	235.5
	ii	1 : 1	cm^2	235	
	iii	1 : 1	cm^2	235.6	
3	i	1 : 1	cm^2	96	95.8
	ii	1 : 1	cm^2	95.8	
	iii	1 : 1	cm^2	95.6	

Results:

① Avg area of figure 1 \rightarrow 24.99 cm²

②

② Avg area of figure 2 \rightarrow 235.5 cm²

③ Avg area of figure 3 \rightarrow 95.8 cm²