

Diffraction due to surface tension waves on water

Part C: Measurement of angle, θ

[C1]

Table C1

Marks

Obs. No.		
1		
2		
3		
4		
5		
6		

[C2]

Graph C1 for determination of θ : _____ versus _____

$\theta =$ _____

Part D: Determination of the surface tension of the liquid

[D1]:

$l_1 =$ _____	$l_2 =$ _____	$L =$ _____
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[D2]:

Table D1

Obs. No.					
1					
2					
3					
4					
5					
6					

[D3]:

Graph for determination of q : _____ versus _____

Marks

Table D2

Obs. No.		
1		
2		
3		
4		
5		
6		

Slope = _____

$q =$ _____

Marks

Equation 2:

Determination of surface tension:

[D4]:

Graph for determination of σ : _____ versus _____

Table D3

Obs. No.		
1		
2		
3		
4		
5		
6		

Slope = _____

Marks

Surface Tension:

$$\sigma = \underline{\hspace{2cm}}$$

Part E: Determination of the viscosity of the water sample

[E1]: Frequency of the signal generator = _____ Hz

Table E1

Obs. No.				
1				
2				
3				
4				
5				
6				

Marks

[E2]:

Graph for determination of δ : _____ versus _____

$$\delta = \underline{\hspace{2cm}}$$

[E3]:

Determination of viscosity, η :

$$\eta = \underline{\hspace{2cm}}$$

Marks
