pure 1/3/21 Expt. No. 6	
Newton's River	
Expt. No. 9 Expt. No. 9 Page No. 14	
Experiment - 6	
Experiment - 6	
Aim:	
To fluid the repractive Endex of given liquid wing Newston's ring set up.	
wing Newton's ring and 10	
Apparatus:	
convex lus, travelling nu eno scope.	
convex less, travelling nuitono scope.	
Theory:	
When light is incedent on such a film, a	
small person gell reflected from the upper surface	
when light is incedent on such a film, a small perbion gets reflected from the upper surface and a major portion is transmitted into the film. The reflected blacks rewrite to produce interference.	
for air,	
$b^2_{mp} - b_m^2 = 4p \lambda R$	
- mrp m	
for l'avids	
02 - 62 = 4PAR	
4	
thefraction index of the given	
liquid ear is given by	
12 22	
$y = D_{m+p}^2 - D_m^2$	
$b_{mfp}^{\prime 2} - b_{m}^{\prime 2}$	
Teacher's Signature:	

Observation Table:

16

20

2.15

2.10

	AO		9		
(x)	Afor	• • • • •	W. T. I.	n	s v
*	tan e	73.53			
	Order of	Res	odings.	Dianety ²	Dutp-Dm2
	fing '	ku left.	Right	· Pr	·
	2	2.352	2.556	0.0416	-
	4	2.310	2-602	0.0852	0.0436
	6	2.278	2-632	0.1253	0.0837
	8	2.252 + 1	2-660	0.1864	0.1748
	10	2.228	2.684	0.2079	0.1663
	12	~ 2· 20·5·	2.712	0.2570	0.2154
	14	2.190	2.734	0.2959	0.2543
F)	· Intoles				
-)	Water				
	Order of	kead	ings	Stamety 2	$b^2 = b^2$
	Order of Ring	Left	<i>(</i> / ₄)	32	Dutp - Du
	t	2:35	2.47	0.0744	
	4	2.30	2.53	0.0529	0.0385
	8	2.21	2.58	0.1369	0.1225
	12	2-19	2.62	0-1249	0-1705
				-	

2-65

2.69

0.2500

0.3481

0.2356

0.3337

	Expt. No
e	Page No
Proceduse:	
alle on light button a	
Click on light button and s	select less of desirable radius.
Adjust the niconoscope position form microscope to view fine The consulent on the series	on to view Newton's Kings.
The the crowners on the off	of Sollie from lett or right of
the centre dark sings and	d take the readings.
More the crossavere and take	ce reading for other sings.
Take the seading from eith	g Either from left or right of d take the readings. Se reading for other rings. her lide of the centre dark ring
Abservations:	
The main scale alvest	s on vernur = 50
least laust =	$\frac{1}{20} \times \frac{1}{50} = \frac{1}{(000)} = 0.001$
Lens wings	20 30 (000
Result:	
	A
refractive Evolex of	given liquéed in 1-301.
l I,	
	Teacher's Signature:

Calculations:

Dois		Dunfer		Me	Dair		
0.0675 0.1375 0.2275	•	0.0385 0.1225 0.1705	:	, †	1.7532 1.1224 1.3343	un vi	
0.3024		0·2356 0·39'37		- 3 °	1.2855		

Ymean = 1.30)

5 es. \$

er