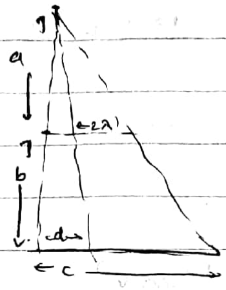
(13) 2



$$\frac{a}{2\lambda} = \frac{a+b}{(c-d)}$$

$$\lambda = \frac{a(c-d)}{2(a+b)}$$

(14) 2

(15) 3

(16) 3

$$f = \frac{1}{2l} v.$$

$f \propto 1/l$ [v]

[illegible] f என

$f+10 \propto 1/39.5$ —①

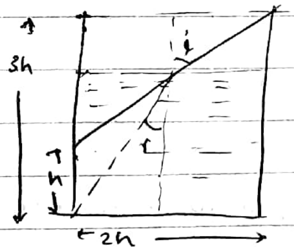
$f \propto 1/40.5$ —②

$\frac{①}{②}$ ⇒ $\frac{f+10}{f} = \frac{40.5}{39.5}$

$395 = 1f$

$f = 395$

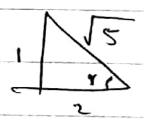
(17) 2



$\tan i = \frac{h}{h} = 1$

$i = 45°$

$\tan r = \frac{h}{2h} = \frac{1}{2}$



$n_1 \sin i = n_2 \sin r$

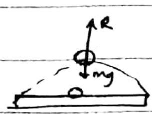
$1 \times \sin 45° = n \times \sin \times \frac{1}{\sqrt{5}}$

$n = \frac{\sqrt{5}}{\sqrt{2}} = \sqrt{\frac{5}{2}}$

(18) (4)

(19) 2

(20) 4



தொடுகையை இழக்கும்போது.

$R = 0$ $\ddot{x} = -\omega^2 x.$

$g = -\omega^2 a.$ $a = -\omega^2 a.$

$\omega^2 = \frac{g}{a}$

$\omega = \sqrt{\frac{g}{a}}$ ⇒ $f = \frac{1}{2\pi}\sqrt{\frac{g}{a}}$

No: _____ Date: __/__/____

(21) 5 தேவை ஆழம் = $\frac{13.3}{1.33} + \frac{7.5}{1.5}$

$= 15\,cm.$

(22) 3

(23) 3 ~~$pt = \frac{1}{2}mv^2$~~

$pt = \frac{1}{2} I\omega^2$

$320 \times t = \frac{1}{2} \times 5 \times \left(2\pi \times \frac{240}{60}\right)^2$

~~$320t = \frac{5}{2} \times 64 \times 10$~~

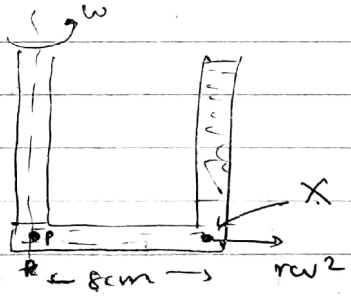
$t = 5$

(24) 3

$f = m\omega^2$

$\omega = \left(\frac{r}{\omega}\right) f$

(25) 4



X இல் சமுக்கம் திருப்தியாக சமமாகும்.

$\pi + 8\times10^{-2}\times10^{3}\times r\omega^2 = \pi + 8\times10^{-2}\times10^{3}\times10$

$r\omega^2 = 10$

$\frac{8}{100}\omega^2 = 10$

$\omega^2 = \frac{1000}{8}$

$\omega^2 = 125$

$\omega = 5\sqrt{5}\,rad.$

Atlas