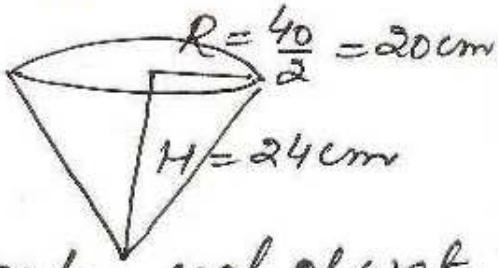
ex 12.4

(5)



volume of water flowing out = vol. of water collected

$$\pi r^2 h = \frac{1}{3}\pi R^2 H$$

$$\frac{5}{20}\times\frac{5}{20}h = \frac{1}{3}\times 20\times 20\times 24$$

$$\Rightarrow h = 128\times 2\times 2\times 100$$

$$= 51200\ cm$$

$$= 512\ m$$

Speed = 10 m/min

h is not the length of pipe

time = dis / Speed

$$= \frac{512}{10}$$

= 51 min 2 × 60 s / 10

= 51 min 12 Second