

$$y = 0.9 \sin \pi \left(\frac{x}{15} + \frac{2t}{0.3} \right)$$

$$\rightarrow y = 0.9 \sin \left(\frac{2\pi x}{0.3} + \frac{\pi t}{15} \right)$$

$$y = a \sin \left(\omega t + \frac{2\pi x}{\lambda} \right) \quad \text{माना } a(9)$$

$$\omega = \frac{2\pi}{0.3}$$

$$\textcircled{i} \quad \omega = 20.94 \text{ rad s}^{-1}$$

$$\textcircled{ii} \quad T = \frac{2\pi}{\omega} = \frac{2\pi}{20.94} = 0.3 \text{ s}$$

$$\textcircled{iii} \quad \frac{2\pi}{\lambda} = \frac{\pi}{15} \quad \therefore \lambda = 30 \text{ cm}$$

$$v = \frac{1}{0.3} \times 30$$

$$= 100 \text{ cm}^{-1}$$