

(c) Radius of the drum = $\frac{70}{2} = 35\text{cm}$

$$\begin{aligned}\therefore \text{No. of revolution} &= \frac{\text{Distance by which the bucket is raised}}{\text{Circumference of the drum}} \\ &= \frac{11 \times 100}{2\pi \times 35} = \frac{11 \times 100 \times 7}{2 \times 35 \times 22} = 5\end{aligned}$$

No. of revolutions = 5