

Sec-7

Q1

$$\text{Sleeper density} = N + X$$

For BC track, total number of sleepers required for 1 km length of railway track.

$$\text{if sleeper density} = N + 5$$

$$\text{Length of one rail} = 12.8 \text{ m} = 13 \text{ m}$$

$$\begin{aligned} \text{Sleeper density} &= N + 5 \\ &= 13 + 5 = 18 \end{aligned}$$

Total number of sleepers required for 640 m length

$$= \frac{18 \times 640}{12.8}$$

$$\Rightarrow = \underline{900} \text{ sleepers}$$