

Date : ___/___/___

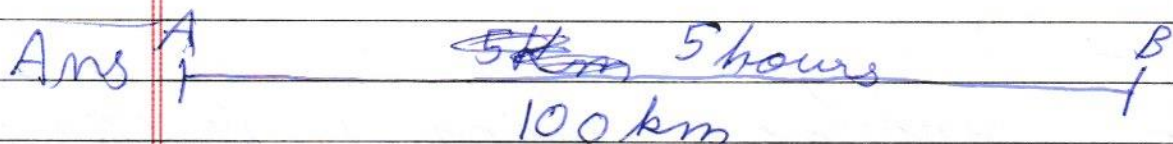
L-13 Motion and Time

(22)

Measuring Speed:

Q1) Calculate the speed travelled by an object as per the given data?

Ans



~~speed~~ speed = $\frac{\text{Distance travelled}}{\text{Time}}$

$$\text{Speed} = \frac{100 \text{ km}}{5 \text{ hr}}$$

$$= 20 \text{ km/hr}$$

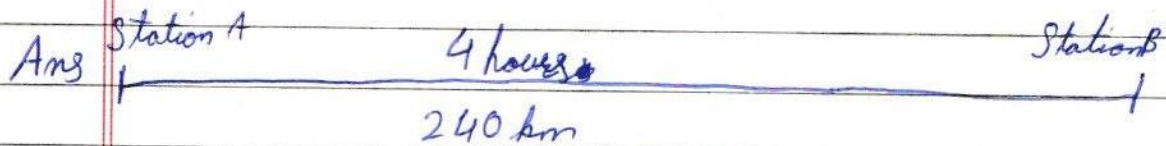
$$= 20 \times \frac{5}{18}$$

$$= \frac{100}{18} \text{ m/s}$$

$$= 5.56 \text{ m/s}$$

Date : ____ / ____ / ____

Q2. The distance between two stations is 240 km. A train takes 4 hours to cover this distance. Calculate the speed of the train.

Ans 

$$\text{Speed} = \frac{\text{Distance travelled}}{\text{time taken}}$$

$$\therefore \text{Speed} = \frac{240 \text{ km}}{4 \text{ hours}}$$

$$= 60 \text{ km/hour}$$

$$= \frac{60 \times 5}{1030} \quad \begin{array}{r} 1893 \end{array}$$

$$= \frac{50}{3}$$

$$= 16.67 \text{ km/hour}$$