

Q1. Speed of traffic - 10 kmph

1 hr \rightarrow 10 km

60 min \rightarrow 10 km

1 m \rightarrow $\frac{1}{6}$ km

$$2 \times \frac{1}{6} \rightarrow \boxed{0.33 \text{ km}}$$

\therefore to travel 300m (which is the error zone of cellular), we would need time \Rightarrow

1 km \rightarrow 6 min

100m \rightarrow $\frac{6}{10}$ min

300m \rightarrow 1.8 min

\therefore anytime after 2 min.

error in cellular \Rightarrow 300m

$t = 2$ min distance \Rightarrow 330m

\therefore can switch to cellular

Data
in 1s

Data in 5s

2. Brain \rightarrow 12.8 kb

\Rightarrow 64 kb

Pop \rightarrow 5 kb

\Rightarrow 25 kb

Other \rightarrow 300 kb

\Rightarrow 1500 kb

\Rightarrow 1589 kb

GPU \Rightarrow

1589

Fog \Rightarrow

1589

1500 \rightarrow upload speed

200 \rightarrow upload speed

\Rightarrow 1.059 s

\Rightarrow 7.945 s

\Rightarrow 1059 ms

\Rightarrow 7945 ms