

Question 10

i) correct number = 3.625

Number wrongly read as = 3.265

$$\text{Error} = 3.625 - 3.265$$

$$= 0.360$$

$$\% \text{ Error} = \frac{0.360}{3.625} \times 100$$

$$= \frac{360}{3625} \times 100 = \frac{36000}{3625} = 9.93\%$$

ii) correct number = 5.87×10^3

No. wrongly written = 5.87×10^3

$$= 0.04 \times 10^3$$

$$\% \text{ Error} = \frac{0.04 \times 10^3}{5.78 \times 10^3} \times 100$$

$$= \frac{0.04}{5.78} \times 100 = \frac{4}{578} \times 100 = \frac{400}{578} \%$$

$$\Rightarrow 1.56\%$$

11) since winning candidate secured 58% of vote polled

$$= (100 - 58)\% \text{ of the vote polled}$$

$$= 42\% \text{ of the vote polled}$$

$$\begin{aligned} \text{Difference of votes} &= 58 - 42 \\ &= 16\% \text{ of the votes} \\ &\text{polled.} \end{aligned}$$

$$\begin{aligned} 16\% \text{ of votes polled} &= \\ 18,336 \end{aligned}$$

$$\Rightarrow \frac{16}{100} \text{ of votes polled} = 18,336$$

$$\Rightarrow \text{votes polled} = 18,336 \cdot \frac{100}{16}$$

$$\Rightarrow \text{votes polled} = \frac{18,336 \cdot 100}{16}$$

$$\Rightarrow \text{votes polled} = 1,14,600$$

winning candidates

$$= \frac{58}{100} \times 1,14,600$$

$$= 66,468$$

losing candidate.

$$= \frac{42}{100} \times 1,14,600$$

$$= 48,132$$

votes polled = 1,14,600.

12) since the losing candidates secured 47% of the votes polled

$$= (100 - 47)\% \text{ the votes polled}$$

$$= 53\% \text{ of the votes polled}$$

Difference of votes = 53 - 47
= 6% of the votes polled