

10) (i) A number 3.625 is wrongly written/read as 3.265. find the percentage error.

→ correct number = 3.625  
 wrongly read number = 3.265  
 Error = 3.625 - 3.265  
 = 0.360

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

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

↓  
Ans

(ii) A number  $5.78 \times 10^3$  is wrongly written as  $5.87 \times 10^3$ , find the error percentage.

⇒ correct number =  $5.78 \times 10^3$   
 Number wrongly written =  $5.87 \times 10^3$

$$\text{Error} = 5.87 \times 10^3 - 5.78 \times 10^3$$

$$= 0.09 \times 10^3$$

$$\text{Error percentage} = \frac{0.09 \times 10^3}{5.78 \times 10^3} \times 100$$

$$= \frac{0.09}{5.78} \times 100 = \frac{9}{578} \times 100 = \frac{900}{578}\%$$

= 1.56%  
 ↳ Ans

(11) In an election between two candidates, one candidate secured 58% of the votes polled and won the election by 18,336 votes. Find the total number of votes polled and the votes secured by each candidate.

→ Since, winning candidate secured 58% of the votes polled.

∴ Losing candidate secured  $\rightarrow (100 - 58\%)$  of the votes polled.  $= 42\%$  of the votes polled.

= Difference of votes  $= 58 - 42$   
 $= 16\%$  of the votes polled.

We are given:

= 16% of the votes polled = 18,336.

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

= Votes polled = 18,336 of  $\frac{100}{16}$

= votes polled =  $\frac{1833600}{16}$

= Votes polled = 1,14,600.

So, 1,14,600 is the answer.

(12) In an election between two candidates, one candidate secured 47% of votes polled and lost the election by 13,366 votes. Find the votes polled and votes secured by the winning candidate.

→ Since, the losing candidate secured 47% of the votes polled winning candidate secured votes =  $(100 - 47)\%$  of the votes polled.

Given;

$$= 6\% \text{ of the votes polled} = 13,366$$

$$= \frac{6}{100} \text{ of the votes polled} = 13,366 \text{ votes polled.}$$

$$= \frac{13,366}{1} \times \frac{100}{6} = \frac{1336600}{6} = 2,06,100$$

= Votes secured by the winning candidate.

$$= \frac{53}{100} \times 2,06,100 = 1,09,333.$$

∴ So, votes polled = 2,06,100 and votes secured by the winning candidate = 1,09,333.

(13) The cost of a scooter depreciates every year by 15% of its value at the beginning of the year. If the present cost of the scooter is ₹ 8000, find cost

(i) after one year      (ii) after 2 years.

= Present cost of the scooter = ₹ 8000.

The cost of scooter depreciates by 15% every year.

(i) cost of scooter after one year.

$$= \frac{(100-15)}{100} \times 8000 = \frac{85}{100} \times 8000 = ₹ 6800$$

(ii) cost of scooter after 2 years:

$$= \frac{(100-15)}{100} \times 6800 = \frac{85}{100} \times 6800 = ₹ 5780$$

(14) In an examination, the pass mark is 40%. If a candidate gets 65 marks and fails by 3 marks, find the maximum marks.

⇒ Marks obtained by the candidate = 65 marks.  
Fails by = 3 marks.  
Pass marks = 65 + 3 = 68.

Percentage of pass marks = 40%.

∴ Required maximum marks :-

$$= \frac{100}{40} \times 68 = 10 \times 17$$

$$= 170$$