10) i) Correct number = 3.625
Wrong number = 3.265

Error = 3.625 − 3.265 = 0.360

% Error = $\frac{\text{Error}}{\text{Correct}} \times 100$

$= \frac{0.36}{3.625} \times 100$

$= \frac{36 \times 1000}{3625 \times 100} \times 100^{20}$ $= \frac{36 \times 8}{29}\%$

$= \frac{288}{29} = 9.93\%$

ii) A number 5.78×10^3 is wrongly written as 5.87×10^3 find the percentage error

Correct number = 5.78×10^3
Wrong number = 5.87×10^3
Error = $5.87 \times 10^3 - 5.78 \times 10^3$
$= 10^3 (5.87 - 5.78)$
$= 0.09 \times 10^3$

% error = $\frac{\text{Error}}{\text{Correct}} \times 100$

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

$= \frac{9 \times 100}{578 \times 100} \times 100$

$= \frac{9}{578} \times 100^{50}$
48

iii) Let the total votes be 100

Winning candidate secure = 58%

Losing candidate = (100 - 58)% = 42%

Difference between votes = 58% - 42%

= 16%

16% of votes polled = ₹18,336

Total votes polled = 16% of 18,336

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

$= \frac{100}{16} \times 18,336$

= 1,14,600

2021/7/18 09:46

12) Let the total votes be 100
Losing candidate = 47%
Winning candidate = (100 - 47)%
= 53%
Difference of their votes = (53 - 47)%
= 6%
6% of votes polled = 12,336
$\frac{6}{100}$ × voted polled = 12,336
Total votes polled = $\frac{12,336 \times 100}{6}$

= 2,06,100

13) Present cost of the scooter = ₹8000
Depreciate after every year = 15%
Depreciation cost in the 1st yr = 15% of 8000
$= \frac{15}{100} \times 8000$

= 1200
∴ Cost of scooter after one year = ₹8000 - ₹1200
= ₹6800

Present cost of the scooter = ₹6800
Depreciation = 15% of 6800
$= \frac{15}{100} \times 6800$

= ₹1020

∴ Cost of scooter after 2 yrs = ₹6800 - ₹1020
= ₹5780

2021/7/18 09:46

14) Pass mark = 40%
Failed mark = 3 marks
Let the maximum mark be x
Pass mark = 65 + 3 = 68

ATQ

40% of $x = 68$

$\Rightarrow \frac{40}{100} \times x = 68$

$\Rightarrow 40x = 68 \times 100$

$\Rightarrow x = \frac{68 \times 100}{40}$

$\Rightarrow x = 160$

2021/7/18 09:46