

(A) PERCENTAGE :- <7>

1. (c) 5 kg = $\frac{1200 \times 26}{100} \Rightarrow 1 \text{ kg} = \boxed{\text{£ } 48}$

2. (b) $p \left(1 + \frac{20}{100}\right)^3 = 21600 \Rightarrow p = \boxed{12500}$
 $\Rightarrow p \times \frac{216}{125} = 21600$

3. (c) Let the total number of voters is 100x.
 Non Casted Voters = 88x
 \therefore According to the question: $(45x - 43x) = 2000$
 $\Rightarrow 2x = 2000$
 $100x = \boxed{100000}$

1. (a) Let the number is a.
 \therefore According to the question:
 ~~$a - \left(\frac{75}{100} \times \frac{120}{100}\right) a = 40$~~
 $a - \left(\frac{75}{100} \times \frac{120}{100}\right) a = 40$
 $\Rightarrow \frac{a}{10} = 40$
 $\Rightarrow a = \boxed{400}$

5. (b) $Z = -8 - 4 - \left(\frac{8 \times 4}{100}\right) = -4.32\%$
 \therefore Required answer is $\boxed{4.32\% \text{ decrease}}$

6. Let Initial Income be £ 100x
 \therefore Expenditure £ 60x
 Savings £ 40x
 Now the present Income is £ 120x
 Expenditure is $\rightarrow (60x + 6x) = \text{£ } 66x$
 Savings is $\rightarrow (120x - 66x) = \text{£ } 54x$
 \therefore Increase in Savings = $\frac{(54 - 40)}{40} \times 100 = \boxed{35\%}$

PERCENTAGE :- (8)

7. (a) Let the respective age of A and B are $100x$ and $200x$

$$\therefore \text{Total age} \rightarrow 300x$$

$$\text{At present age of A} \rightarrow 120x$$

$$\text{Now the total age of A and B together is} = \left(\frac{300x \times 130}{100} \right) = 390x$$

$$\therefore \text{Age of B at present is} = (390x - 120x) = 270x$$

$$\therefore \text{Increase percentage of B's weight} = \frac{270x - 200x}{200x} \times 100 = 35\%$$

$$\left[\frac{(390x - 120x) - 200x}{200x} \times 100 \right] \% = \boxed{35\%}$$

8. (a) Let the initial price per kg of rice is ₹100.

The expenditure is ₹5000.

$$\text{Now; the present expenditure is} = \left(\frac{5000 \times 120}{100} \right) = ₹6000$$

Increase price of rice per kg = ₹130

$$\text{So; new consumption} = \left(\frac{6000}{130} \right) = \boxed{46 \text{ kg}}$$

(A) PERCENTAGE :- (9)

9. (a) Let total apples be 100.

$$\therefore \text{First day he throws} = \left(\frac{50 \times 20}{100} \right) = 10 \text{ apples.}$$

$$\text{Next day he throws} = \left(\frac{40 \times 40}{100} \right) = 16 \text{ apples.}$$

$$\text{Total number of apples} = (10 + 16) = 26 \text{ apples.}$$

$$\therefore \text{Required answer is: } \boxed{26\%}$$

10. (c) Let the total number of books be $100x$.

$$\therefore \text{History books} = 30x$$

$$\therefore \text{English " } = \left(\frac{70x}{2} \right) = 35x$$

$$\text{Now, German " } = \left(35x \times \frac{2}{5} \right) = 14x$$

$$\therefore \text{According to the question: } (35x - 14x) = 4200$$

$$\Rightarrow 21x = 4200$$

$$\Rightarrow x = 200$$

$$\Rightarrow 100x = \boxed{20000}$$

$$11. (c) \left(15000 \times \frac{110}{100} \times \frac{120}{100} \times \frac{90}{100} \right) = \boxed{17,820}$$

12. (b) Let the no. of student be x .

$$\therefore \text{Each student get sweets} = \frac{x}{5}$$

$$\therefore \text{According to the question :- } \frac{x}{5} = 2000$$

$$\Rightarrow x = 10,000$$

$$\Rightarrow x = \boxed{100}$$

(A) PERCENTAGE :- (10)

13. Let the initial solution be x litres.

$$\begin{aligned} \therefore (x-15) \times \frac{20}{100} &= \frac{10x}{100} && \Rightarrow 10x = 300 \\ \Rightarrow 20x - 300 &= 10x && \Rightarrow x = \boxed{30 \text{ litres}} \end{aligned}$$

14. (c) ~~$(15000 \times \frac{11}{10} \times \frac{12}{10} \times \frac{9}{10}) = \boxed{17,820}$~~

14. (b) Let the maximum marks be x .

$$\therefore \frac{40}{100}x - 20 = 60 \Rightarrow \boxed{x = 200}$$

15. (a) $\frac{100 \times 15}{(100+15)} = \frac{100 \times 15^3}{115 \times 23} = \frac{300}{23} = \boxed{13 \frac{1}{23} \%}$

16. (b) Let the Pankaj have initially ₹ P .

\therefore According to the question:

$$\left\{ \left(\frac{50P}{100} \right) \times \frac{2}{5} \right\} - 500 = 8000 \Rightarrow P = \boxed{42,500}$$

17. (b) $A:B = 140:100 \rightarrow 7:5$
 $B:C = 70:100 \rightarrow 7:10$

$$A:B:C = 49:35:50$$

\therefore According to the question: $1 = 1200$
 $50 = \boxed{60000}$

18. (c) $\left[100 - \{ (40+50) - 10 \} \right] \% = \boxed{20\%}$

19. (a) Let new weight be x kg.

Since the pulp is not being evaporated, the quantity of pulp should remain same in both cases. This gives \rightarrow

$$(100-76)\% \text{ of } 20 = (100-95)\% \text{ of } x$$

$$\Rightarrow \frac{4}{100} \times 20 = \frac{5x}{100}$$

$$\Rightarrow x = \boxed{16 \text{ kg}}$$

(A) PERCENTAGE :- (11)

20. (d) Let the Original price per kg be ₹ 100.

Then the money required to buy 49 kg is ₹ 4900

New price per kg is $(100 - 2) = ₹ 98$

So, the quantity of wheat bought in ₹ 4900 is →

$$\left(\frac{4900}{98}\right) = \boxed{50 \text{ kg}}$$

21. (b) Now, the total increase percentage in the number of students be = $\left[\frac{5600 - 5000}{5000} \times 100\right]$

$$= \left[\frac{600}{5000} \times 100\right] = 12\%$$

(Boys) 10
(Girls) 15
: 2
3

$$\left(\frac{2}{5} \times 5000\right) = \boxed{2000}$$

22. (a) $\frac{100 \times 20}{(100 + 20)} = \frac{100 \times 20}{120} = \frac{50}{3} = \boxed{16\frac{2}{3}\%}$

23. (c) Let the needed alloy be 100 x kg.
∴ According to the question: $15x = 90$
 $x = 6$
 $100x = \boxed{600 \text{ kg}}$

24. (d) Total no. of voters Casted & actually ∴ Voters of Winner Candidate
 $= \left(1000 \times \frac{88}{100} \times \frac{90}{100}\right) = 792$
∴ $(5x + x) = 792 \Rightarrow x = 132$
 $5x = (5 \times 132) = \boxed{660}$

25. (a) I = 10,000 ; E = 6000 ; S = 4000

Now, Income = 11000 ; Exp = 7200 ; Savings = 3800

∴ Required answer is $= \left[\frac{4000 - 3800}{4000} \times 100\right] = \boxed{5\%}$