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APRIL • SATURDAY

Week-2

Day 1DPP

1) Sum of ages of 50 students = $50 \times 20 = 1000$

Sum of ages of 10 = $10 \times 16 = 160$

let avg age of remaining 40 student = be x

$$160 + 40x = 900$$

$$40x = 900 - 160$$

$$x = 240$$

$$x = \frac{240}{40}$$

$$x = 18.5$$

②

Let total profit be 100 ₹

then 5% means ₹ 5 to charity

$$95 \times \frac{3}{5} = 57 ₹$$

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SUNDAY

If A = 57 and 100 ₹ profit.

$$\text{then total profit} = \frac{100}{57} \times 85$$

$$= 85500$$

$$57$$

$$= 1500$$

3 Let their investment by x for 14 months, y for 8 months & z for 7 months.

$$\text{then } 14x : 8y : 7z = 5 : 7 : 8$$

$$\frac{14x}{8y} = \frac{5}{7}$$

$$98x = 40y$$

$$y = \frac{49x}{20}$$

$$\& \frac{14x}{7z} = \frac{5}{8}$$

$$112x = 35z$$

$$\frac{112x}{35} = \frac{16z}{5}$$

$$\text{Now, } x : y : z \Rightarrow \frac{x}{20} : \frac{49x}{20} : \frac{16x}{5}$$

$$= 20 : 49 : 64$$

4) None of above (as I & II is sufficient III data is not required)

$$5 \text{ SP} = 18,700$$

$$\text{CP} = x$$

$$\text{loss} = 15\%$$

$$\text{SP} = \text{CP} - \frac{15}{100} \times x$$

$$18700 = \frac{85}{100} x$$

$$x = 22,000$$

Now to gain 15%

$$\text{SP} = \text{CP} + \frac{15 \times \text{CP}}{100}$$

$$\text{SP} = 22000 + \frac{15}{100} \times 22000$$

$$\text{SP} = 25300$$

⑥ Let A's 1 day work be x
 & B's 1 day work be y ✓

$$\text{then } x + y = \frac{1}{30}$$

$$16x + 44y = 1$$

On solving both eq.

$$x = \frac{1}{60}, y = \frac{1}{60}$$

B will finish whole work alone in 60 days

7 (i) (ii) Dom exam had ^{almost} same difficulty level
 (b) (iv) 430
 (c) (d) section
 (d) A section
 (e) (d) section

Reasoning

1 ISS

2 VET

3 NEO

4 Pinx north

5 $P - M + N \times Q$