

TALHA SARFRAZ KHAN

OB-59

## Section - II

QUESTION # 06

(part d)

(i) Uninterested

(ii) White

(part b)

Original price of shoes = 80\$

Discount = 15% , Sales tax = 10%

Original price = ?

$$(i) \text{ Price after discount} = 80 \times \frac{15}{100} = 12$$

$$" \quad " \quad " = \cancel{12} 80 - 12$$

$$= 68\$$$

$$(ii) \text{ Price after Sales tax} = 68 \times \frac{10}{100} = 6.8$$

$$" \quad " \quad " \quad " = 68 + 6.8$$

$$= \$74.80$$

2/

1/1/20

(Part - a)

$$A : B : C : D = 4 : 7 : 3 : 1$$

$$A = 4x, B = 7x, C = 3x, D = 1(x)$$

$$A = 50 + C \rightarrow \textcircled{1}, B = ?$$

put the value of A & C in  $\textcircled{1}$

$$4x = 50 + 3x$$

$$4x - 3x = 50$$

$$\boxed{x = 50}$$

Now put the value of x in A, B, C, D

(i)  $A = 4(50)$

$$\boxed{A = 200}$$

(ii)  $B = 7(50)$

$$\boxed{B = 350}$$

(iii)  $C = 3(x)$

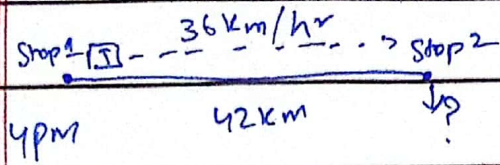
$$C = 3(50) \Rightarrow \boxed{150}$$

(iv)  $D = 50$

$\rightarrow A = 200, C = 150$ . Hence proved that A is 50 times more than C.

$\rightarrow$  Also,  $\boxed{B = 350}$

(Part - c)



$$\text{Distance} = s = 42 \text{ km}$$

$$\text{Speed} = v = 36 \text{ km/hr}$$

$$t = ?$$

For time?

$$t = \frac{s}{v}$$

$$= \frac{42 \text{ km}}{36 \text{ km/hr}} \Rightarrow \frac{7}{6} \text{ hr}$$

→ Convert hrs into minutes, we get

$$= \frac{7}{6} \times 1 \text{ hr} = 60 \text{ min}$$

$$= \frac{7}{6} \times (60)$$

$$= 70 \text{ min.}$$

The train left at 4 pm so,

$$= 4 \text{ pm} + 70 \text{ min}$$

Arrival Time = 5:10 pm, that's when the train arrived.

Question # 08:-

(Part d)

Total amount = Rs. 4320

Zain : Aslam : Ashraf

2 : 3 : 7

Total parts =  $2 + 3 + 7 = 12$

(i) Zain's Parts =  $\frac{2}{12} \times 4320$

= Rs. 720

(ii) Aslam's parts =  $\frac{3}{12} \times 4320$

= Rs. 1080

(iii) Ashraf's parts =  $\frac{7}{12} \times 4320$

= Rs. 2520

If we add all parts i.e.

$720 + 1080 + 2520$  we get  
4320.

(part b)

Hassan = H , Ali = A , Akbar = AK , Nasir = N,  
Shehbaz = S.

$$H = \frac{1}{3}A \rightarrow \textcircled{1} \quad AK = 3N \rightarrow \textcircled{3}$$

$$A = 5AK \rightarrow \textcircled{2} \quad S = N + A \rightarrow \textcircled{iv}$$

Total amount = Rs. 4000

$AK = 3N$  (we know that from above)

put AK in  $\textcircled{2}$

$$\text{(i)} \quad A = 5(3N) \Rightarrow \boxed{15N} \quad S = N + A$$

$$\text{now put } A \text{ in } \textcircled{1} \quad = N + 15N$$

$$\text{(ii)} \quad H = \frac{1}{3}(15N) = \boxed{5N} \quad \boxed{S = 16N}$$

$$\text{(iii)} \quad 8000 = 5N + 15N + 3N + 16N$$

$$8000 = 40N$$

$$\boxed{N = \frac{8000}{40}} \Rightarrow 200$$

For each person

$$H = 5N = 5(200) \Rightarrow 1000 \quad S = 16N \Rightarrow 3200$$

$$A = 15N \Rightarrow 3000$$

$$AK = 3N \Rightarrow 600$$

$$N = 200$$

Pocket money of Hassan = Rs. 1000

" " " Ali = Rs. 3000

" " " Akbar = Rs. 600

" " " Nasir = Rs. 200

" " " Shabhat = Rs. 3200.

If we add this it sums up to 8000 -

(Part - c)

Radius = 7m

Surface Area = ? , Volume = ?

$$\begin{aligned} \text{(i) Surface Area} &= 4\pi r^2 \\ &= 4 \times 3.14 \times (7)^2 \\ &= 4 \times 3.14 \times 49 \end{aligned}$$

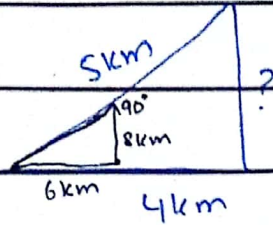
$$\text{Surface Area} = 615.44 \text{ m}^2$$

$$\text{(ii) Volume} = \frac{4}{3}\pi r^3$$

$$= \frac{4}{3}(3.14)(7)^3$$

$$\text{Volume} = 1436.026 \text{ m}^3$$

(part 9)



First taking the whole triangle.

$$(H)^2 = (B)^2 + (P)^2$$

$$(5)^2 = (4)^2 + P^2$$

$$25 = 16 + P^2$$

$$25 - 16 = P^2$$

$$9 = P^2$$

$$\sqrt{P^2} = \sqrt{9}$$

$$P = 3 \text{ km}$$

(i) Now to find the total distance we add all sides.

$$= 5 \text{ km} + 4 \text{ km} + 3 \text{ km} + (\text{Additional } 6 \text{ km and } 8 \text{ km})$$

$$= 5 + 4 + 3 + 8 + 6$$

$$= 26 \text{ km} \rightarrow \text{Total distance covered.}$$

(ii) How far is he from starting point

Using pathagorus theorem:-

$$(H)^2 = (B)^2 + (P)^2$$

$$(H)^2 = (6)^2 + (8)^2$$

$$H^2 = 36 + 64$$

$$H^2 = 100$$

Taking square root, we get

$$\sqrt{H^2} = \sqrt{100}$$

$$H = 10 \text{ km}$$

→ Man is 10 km away from starting point.