Quiz Date: 1st June 2020

Q1. Sakshi and Divya started a business with investment Rs. 6000 and Rs. 10000 respectively. Divya also worked as working partner for that she charged 20% of total profit and remaining profit was divided between them in the ratio of their investment. After 1 year total profit from business was Rs. 1500. Find the profit share of Sakshi.
(a) Rs. 750
(b) Rs. 1050
(c) Rs. 450
(d) Rs. 500
(e) Rs. 600

Q2. Sheetal and Sakshi two working employee of Add 247 got salaries per month Rs 24000 and Rs 32000 respectively. Both invest 50% and 40% of their respective salaries in mutual funds and after a year they got a total profit from their investment as Rs 12400, then find the profit of Sakshi obtained from mutual funds.
(a) Rs.5400
(b) Rs.7200
(c) Rs.9600
(d) Rs.6400
(e) Rs.8400

Q3. A and B enter into a partnership with Rs. 50,000 and Rs. 60,000 respectively. C joins (12 – x) months before end of the year, contributing Rs. 70,000 and B leaves them after x months from the start of the year. If they share the annual profit in the ratio of 20 : 18 : 21, then find the value of x.
(a) 6 months
(b) 3 months
(c) 9 months
(d) 8 months
(e)10 months

Q4. A, B and C enter into a partnership by investing Rs. 1,600, Rs. 3,600 and Rs. 4,800. A is a working partner and gets one fifth of the profit for his services and remaining profit is divided amongst the three in their ratio. What is the sum of the profit of B and C get if A gets Rs. 5330?
(a) Rs. 13,923
(b) Rs. 10,920
(c) Rs. 14,940
(d) Rs. 10,993
(e) Rs. 11,993

Q5. X and Y enter into a partnership and invested Rs. 900 and Rs. 700 respectively. If they split half of the profit equally for their efforts and the balance in the ratio of their investments and X got Rs. 47 more than Y. what was the profit made by the company?
(a) Rs. 376
(b) Rs. 652
(c) Rs. 752
(d) Rs. 954
(e) Rs. 854

Q6. Pinku, Rinku and Tinku divide an amount of Rs. 4200 amongst themselves in the ratio of 7 : 8 : 6, respectively. If an amount of Rs. 200 is added to each of their shares, What will be the new respective ratio of their shares of amount?
(a) 8 : 9 : 5
(b) 7 : 9 : 5
(c) 7 : 8 : 6
(d) 8 : 9 : 7
(e) 7 : 8 : 9

Q7. Ravi sold a pen to Bina at Rs 60 profit. Bina increased its marked price by 50% and then sold it to Chitra at a discount of 25%. Profit earned by Bina is Rs 10 more than Ravi. Find cost price of pen to Ravi?
(a) 250
(b) 500
(c) 750
(d) 1000
(e) 1250

Q8. A man bought an article at Rs.600. He marks up the cost of article and sells it in such a way that if he will give $46\frac{2}{3}\%$ discount then loss occur to him is equal to profit earn by him if he will give 20% discount. Find the Mark price of article?
(a) Rs.1500
(b) Rs.800
(c) Rs.900
(d) Rs.1200
(e) Rs.1800

Q9. In the year 2002, the cost price of an item was 90% of the selling price while in 2003, the cost price was 95% of the selling price. If the gross profit remains the same for both the years, what is the percentage increase in the cost price of the item from 2002 to 2003 ?
(a) 120%
(b) 95%
(c) 111%
(d) 105%
(e) 102%

Q10. The prime cost of an article is three times the value of the raw material used. The cost of raw material increases in the ratio of 5 : 12 and manufacturing expenses in the ratio 4 : 5. The article, which originally cost Rs. 6, will now cost ?
(a) Rs. 10
(b) Rs. 17
(c) Rs. 20.50
(d) Rs. 9.8
(e) Rs. 18

Directions (11-15): Find the approximate value of given question:
Q11. $624.89 + (31.89)^2 - 49.01 = (?)^2$
(a) 35
(b) 40
(c) 36
(d) 44
(e) 46

Q12. $\frac{163.98+?}{24.98} + 389.87 + 19.94\% \text{ of } 724.86 = 24.98\% \text{ of } 2203.93$
(a) 206
(b) 216
(c) 226
(d) 236
(e) 246

Q13. $?\% \text{ of } 749.89 + \sqrt[3]{728.89} = 26.89\% \text{ of } 499.87 + 29.89\% \text{ of } 349.89 + \sqrt{80.87}$
(a) 38
(b) 32
(c) 40
(d) 42
(e) 28

Q14. $(11.94)^2 + 12.493 \times 15.99 - \sqrt{13224.98} - (?)^2 = (14.96)^2$
(a) 9
(b) 2
(c) 8
(d) 5

(e) 10

Q15. $\frac{359.93}{?} = (8.94)^3 - 14.5 \times 39.89 + (1.95)^2 - 3^4$

(a) 15
(b) 2
(c) 12
(d) 9
(e) 5

Solutions

S1. Ans.(c)
Sol.

Profit ratio of Sakshi to Divya = 6000: 10000 = 3: 5
Total profit of Business = Rs. 1500
Divya's share as working partner
$= 1500 \times \frac{20}{100}$
= Rs. 300
Now Rs. (1500 – 300) = 1200 is distributed according to their investment
So, share of Shakshi = $\frac{3}{5+3} \times 1200$ = Rs. 450

S2. Ans.(d)
Sol.

Ratio of funds invested by Sheetal and Sakhsi in mutual funds = $24000 \times \frac{50}{100} : 32000 \times \frac{40}{100}$
= 15 : 16
∴ Required answer = $\frac{16}{31} \times 12400$
= Rs.6400

S3. Ans.(c)
Sol.

Ratio of their investments
A : B : C = 50,000 × 12 : 60,000 × x : 70,000 × (12 – x)
60 : 6x : 7 (12 – x)
Now, $\frac{60}{6x} = \frac{20}{18} \Rightarrow x = 9$

S4. Ans.(b)
Sol.
Let total profit be Rs. x.
A : B : C = 1600 : 3600 : 4800
A : B : C = 4 : 9 : 12
Profit of $A = \frac{x}{5} + \frac{4x}{5} \times \frac{4}{25} = 5330$
$\Rightarrow \frac{x}{5} + \frac{16x}{125} = 5330$
41x = 5330 × 125
$\Rightarrow x = 16250$
Sum of profit of B and C = 16250 – 5330
= Rs. 10920

S5. Ans.(c)
Sol.
Ratio of investment of x and y is 9 : 7
Total profit = K
$\frac{9}{16} \times \frac{K}{2} - \frac{7K}{16 \times 2} = 47$
2K = 47 × 16 × 2
K = Rs. 752

S6. Ans.(d)
Sol.

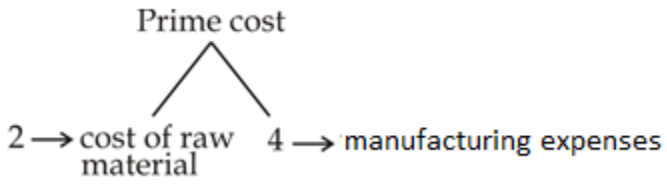
Let Pinku's share = 7x
Rinku's share = 8x
Tinku's share = 6x
According to the question,
$7x + 8x + 6x = 4200$
$\Rightarrow 21x = 4200$
$\therefore x = \frac{4200}{21} = 200$
Hence, amount of Pinku
$= 7x = 7 \times 200 = Rs.1400$
Amount of Rinku
$= 8x = 8 \times 200 = Rs.1600$
Amount of Tinku
$= 6x = 6 \times 200 = Rs.1200$
Now, Rs. 200 is added to each share
Then,
New ratio of shares
$= (1400 + 200) : (1600 + 200) : (1200 + 200)$
$= 1600 : 1800 : 1400$
$= 16 : 18 : 14 = 8 : 9 : 7$

S7. Ans.(b)
Sol.
Let CP of Pen for Ravi = x
ATQ,
(x + 60) = cost price for Bina
Bina's selling price = $(x + 60) \times \frac{150}{100} \times \frac{75}{100}$
= 1.125x + 67.5
ATQ,
1.125x + 67.5 – x - 60 = 70
0.125x + 7.5 = 70
$x = \frac{62.5}{0.125} \Rightarrow x = 500$
cost price of pen for Ravi = Rs 500

S8. Ans.(c)
Sol.
Let Mark price of article is 300x
S.P if he will give 20% discount = $300x \times \frac{80}{100} = 240x$
S.P if he will give $46\frac{2}{3}$ % discount = $300x \times \frac{160}{300} = 160x$
ATQ,
$600 - 160x = 240x - 600$
$1200 = 400x$
Mark price of article = $Rs. \frac{1200}{400} \times 300 = Rs.900$

S9. Ans.(c)
Sol.
Let S.P. in year 2002 was Rs. x.
And in year 2003 was Rs. y
In 2002, C.P. = 0.9x
In 2003, C.P. = 0.95y
Since profit in both years is same
$\therefore x - 0.9x = y - 0.95y$
$\Rightarrow 2x = y$
$\therefore$ Required percentage
$= \frac{0.95 \times 2 - 0.9}{0.9} \times 100$
$= 111.11$
$\simeq 111\%$

S10. Ans.(d)
Sol.
Prime cost = 3 × cost of raw material



$\therefore$ New cost = $2 \times \frac{12}{5} + 4 \times \frac{5}{4}$
= Rs.9.8

S11. Ans.(b)
Sol.
$(?)^2 = 625 + (32)^2 - (7)^2$
$(?)^2 = 625 + 1024 - 49$
$(?) = 1600$
$? = 40$

S12. Ans.(d)
Sol.
$\frac{164+?}{25} + 390 + 20\% \text{ of } 725 = \frac{25}{100} \times 2204$
$\frac{164+?}{25} + 535 = 551$
$? = (551 - 535)\ 25 - 164$
$? = 400 - 164$
$? = 236$

S13. Ans.(b)
Sol.

$\frac{?}{100} \times 750 + \sqrt{729} = \frac{27}{100} \times 500 + \frac{30}{100} \times 350 + \sqrt{81}$
$7.5 \times ? + 9 = 135 + 105 + 9$
$? = 32$

S14. Ans.(b)
Sol.
$(12)^2 + 12.5 \times 16 - \sqrt{13225} - (?)^2$
$= (15)^2$
$144 + 200 - 115 - (?)^2 = 225$
$(?)^2 = 229 - 225$
$? = 2$

S15. Ans.(e)
Sol.
$\frac{360}{?} = (9)^3 - 14.5 \times 40 + (2)^2 - 81$
$\frac{360}{?} = 729 - 580 + 4 - 81$
$? = \frac{360}{72}$
$? = 5$