

$$29.1; \quad \begin{array}{l} \textbf{B} \\ 16\frac{2}{3}\% = \frac{1}{6} \end{array} \quad \begin{array}{l} \textbf{P} \\ 11\frac{1}{9}\% = \frac{1}{9} \end{array}$$

$0 \rightarrow [\text{No profit & No loss}]$

$$\frac{1}{9} : \frac{1}{6}$$

Taking L.C.M.

$$\begin{array}{l} \frac{1}{9} \times 18 : \frac{1}{6} \times 18 \\ 2 : 3 \end{array}$$

$$\begin{array}{l} \textbf{B} : \textbf{P} \\ 200 : 300 \\ \downarrow 13\%P \qquad \downarrow 9\%P \\ 26 \qquad \qquad \qquad 27 \\ \text{---} \\ 53 \\ \downarrow \times 20 \\ 1060 \end{array}$$

$$\begin{aligned} \text{C.P. of Book} &= 200 \times 20 = ₹ 4000 \\ \text{C.P. of Pen} &= 300 \times 20 = ₹ 6000 \end{aligned}$$

$$30.1; \text{C.P. of 25 oranges} \rightarrow ₹ 1$$

$$\text{C.P. of 1 orange} \rightarrow ₹ \frac{1}{25}$$

$$\text{S.P.} = \frac{100+P\%}{100} \times \text{C.P.}$$

$$= \frac{125}{100} \times \frac{1}{25} = \frac{5}{100} = \frac{1}{20}$$

Hence he sells 1 orange for $\frac{1}{20}$ /-

Hence for ₹ 1 he sells 20 oranges

$$31.1; \text{C.P. of 1 orange} = \frac{1}{11}$$

$$\text{S.P.} = \frac{100+P\%}{100} \times \text{C.P.} = \frac{110}{100} \times \frac{1}{11} = \frac{1}{10}$$

Hence he sells 10 oranges for ₹ 1

$$32.1; \text{S.P. of 1 orange} = \frac{1}{12} /-$$

Loss = 20%

$$\text{C.P.} = \frac{100}{100-L\%} \times \text{S.P.}$$

$$\frac{100}{80} \times \frac{1}{12}$$

$$\text{S.P.}_2 (\text{at } 20\% \text{ profit}) = \frac{100+P\%}{100} \times \text{C.P.}$$

$$= \frac{120}{100} \times \frac{100}{80 \times 12} = \frac{10}{80}$$

$$\text{S.P.}_2 = \frac{1}{8}$$

Hence 8 oranges are sold for ₹ 1

$$33.1; \text{S.P. of 32 toffees} = ₹ 1$$

$$\text{S.P. of 1 toffee} = ₹ \frac{1}{32}$$

L % = 40%

$$\text{C.P.} = \frac{100}{100-L\%} \times \text{S.P.}$$

$$\frac{100}{60} \times \frac{1}{32}$$

$$\text{S.P.}_2 = \frac{100+P\%}{100} \times \text{C.P.}$$

$$= \frac{120}{100} \times \frac{100}{60} \times \frac{1}{32}$$

$\text{S.P.}_2 = \frac{1}{16}$ Hence 16 toffees are sold for ₹ 1

33.1; Paramount Concept:-

$$\frac{P}{L} = \frac{100+20}{100-40} = \frac{120}{60} = \frac{2}{1}$$

This means in place of
1 ₹ → 32P.

2 ₹ → 32P. will fetch profit of 20%.
Hence for ₹ 1, 16 toffees must be sold.

34.2; Paramount Concept:-

$$\frac{P}{L} = \frac{100+20}{100-20} = \frac{120}{80} \rightarrow \frac{60}{40} \text{ (given)}$$

40/- for 45 lemons (loss)
60/- for 45 lemons (profit)

$$₹ 1 \quad \frac{45}{60} \quad "$$

$$₹ 24 \quad \frac{45}{60} \times 24 = 18 \text{ lemons}$$

2nd method:-

34.2; S.P. of 45 lemons = 40/-

$$\text{S.P. of 1 lemons} = \frac{40}{45} /-$$

$$L = 20\%$$

$$\text{C.P.} = \frac{100}{80} \times \frac{40}{45} = \frac{100}{90} = \frac{10}{9}$$

$$\text{S.P.}_2 = \frac{100+20}{100} \times \text{C.P.}$$

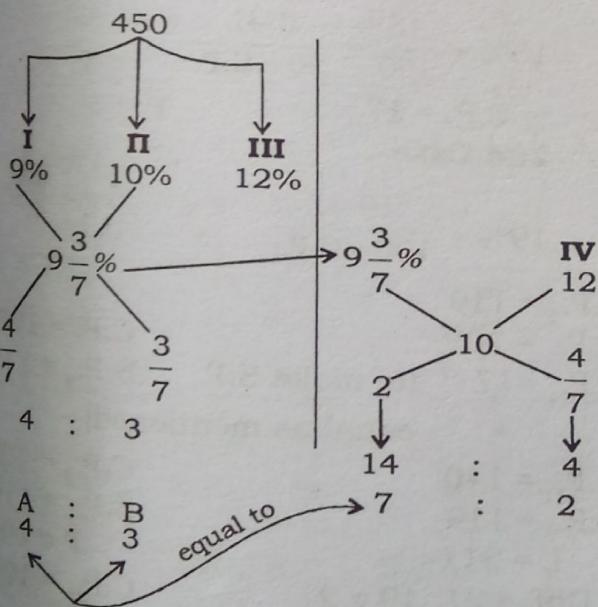
$$= \frac{120}{100} \times \frac{10}{9} = \frac{4}{3} /-$$

S.P. of $\frac{4}{3}$ / - for 1 orange.

$$" " 24/- for = \frac{24}{4/3} = \frac{24 \times 3}{4}$$

$$= 18 \text{ oranges}$$

35.2;



Hence Ratio of A : B : C
4 : 3 : 2

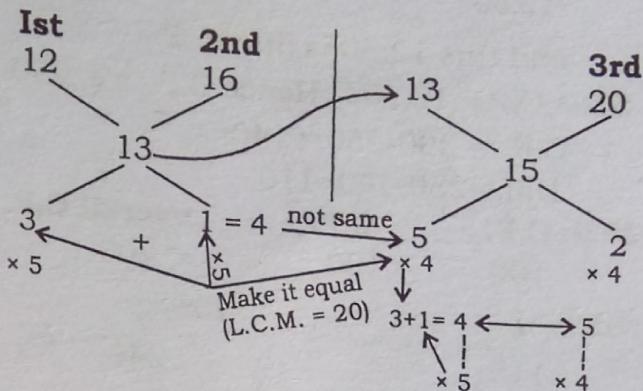
then the three types are in the ratio
4 : 3 : 2

$$\text{1st type} = \frac{4}{9} \times 450 = 200 \text{ pens}$$

$$\text{2nd type} = \frac{3}{9} \times 450 = 150 \text{ pens}$$

$$\text{3rd type} = \frac{2}{9} \times 450 = 100 \text{ pens}$$

36.1;



$$15 : 5 : 8$$

$$\text{1st type} = \frac{15}{28} \times 560 = 15 \times 20 = 300$$

$$\text{2nd type} = \frac{5}{28} \times 560 = 5 \times 20 = 100$$

$$\text{3rd type} = \frac{8}{28} \times 560 = 8 \times 20 = 160$$

37.1; C.P. = x

$$P = x\%$$

$$\text{S.P.} = \frac{100 + P\%}{100} \times \text{C.P.}$$

$$96 = \frac{100 + x}{100} \times x$$

$$9600 = 100x + x^2$$

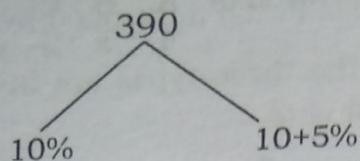
$$= x^2 + 160x - 60x - 9600$$

$$= x(x + 160) - 60(x + 160)$$

$$= x = 60 \text{ or } -160$$

$$x = 60$$

38.4;



If he sell at 10% profit, he gains

$$\frac{10}{100} \times 390 = 39/-$$

$$\begin{array}{r} 51.50 \\ - 39 \\ \hline 12.50 \end{array}$$

and this 12.50 is due to 5%.

$5\% \times C.P. = 12.50/-$. Hence $C.P._2 = ₹ 250$

$$C.P._2 = 390 - 250 = 140.$$

$$Diff. = 250 - 140 = 110$$

39.2; C.P. ₁	C.P. ₂	overall C.P.
100	100	200
15% ↓	20% ↓	
115	240	
$C.P._2 = 240 - 115$ = ₹ 125		

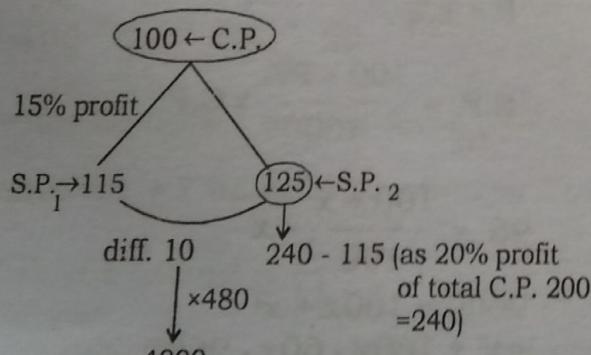
$$\text{Difference} = C.P._2 - C.P._1 = 10$$

If difference = 10 then C.P. = 100

If difference = 4800 then C.P.

$$= \frac{100 \times 4800}{10} = ₹ 48000$$

2nd Method:-



$$10 \times 480 = 4800$$

(Since $10 \times 480 \rightarrow 4800$. Hence 100 is also multiplied by 480)

Hence C.P. = 48000/-

$$40.4; C.P. \quad \begin{array}{r} 100 \\ P \end{array} \quad \begin{array}{r} 100 \\ 27 \end{array} \quad \begin{array}{r} = 200 \\ = 50/- \end{array}$$

$$S.P._2 = 50 - 27 = 23$$

⇒ difference between two S.P.

$$\begin{array}{ccc} 127 & & 123 \\ \swarrow & & \searrow \\ \text{diff. } 4 & & \\ \downarrow & \times 150 & \\ 600 & & \end{array}$$

$$C.P. = 100 \times 150 = 15,000$$

41.1; **P L**

$$60\% = \frac{3 \rightarrow P}{5 \rightarrow C.P.}$$

$$20\% = \frac{1 \rightarrow L}{5 \rightarrow C.P.}$$

$$C.P. \rightarrow 5$$

$$I. C.P._2 \rightarrow 5$$

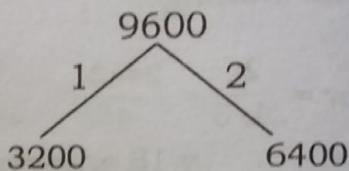
$$S.P. \rightarrow 8$$

$$S.P._2 \rightarrow 4$$

given S.P. of both articles is same.

So S.P.₂ is multiplied by 2.

$$C.P._1 : C.P._2 = 5 : 10 \\ 1 : 2$$



42.1; **Ist Case-**

$$15\% = \frac{15}{100} = \frac{3 \rightarrow L}{20 \rightarrow C.P.}$$

$$\therefore S.P. = 17$$

2nd Case-

$$19\% = \frac{19 \rightarrow L}{100 \rightarrow C.P._1}$$

$$S.P._2 = 119$$

$$C.P._1 = 20 \times 7$$

$$S.P._1 = 17 \times 7$$

$$(to \ make \ S.P. \ equal \ as \ mentioned)$$

$$C.P. = 100$$

$$S.P._2 = 119$$

$$C.P._1 = 140$$

$$C.P._2 = 100$$

$$S.P._1 = 119$$

$$S.P._2 = 119$$

$$L = 21/-$$

$$P = 19/-$$

$$Diff. = 21 - 19 = 2/-$$

$$C.P._2 = 100$$

$$\text{If difference} = 90 \quad S.P. = \frac{100 \times 90}{2} \\ = 4500$$

43.2; **Ist** **2nd**
 $C.P. = 4 \times 360 \rightarrow 1440 \quad C.P. = 5 \times 300 \rightarrow 1500$

↑ ↓
 $S.P. = 5 \times 360 \rightarrow 1800 \quad S.P. = 6 \times 300 \rightarrow 1800$
Total C.P. = $1440 + \frac{1500}{2} = 2940$

Ind method:-

$$S.P._1 = 1800 \quad S.P._2 = 1800$$

$$P\% = \frac{P}{S.P.} \times 100 \text{ (as profit calculated on S.P.)}$$

$$P\% = \frac{P}{C.P.} \times 100$$

$$20 = \frac{P}{1800} \times 100 \quad C.P._2 = \frac{100}{100+P\%} \times S.P.$$

$$P = \frac{36000}{100} \quad C.P._2 = \frac{100}{120} \times 1800$$

$$P = 360 \quad C.P._2 = 1500$$

$$C.P._1 = S.P._1 - P$$

$$C.P._1 = 1440$$

$$\text{Total C.P.} = ₹ 2940$$

$$44.2; P = 20\% \quad L = 10\% \quad L = 25\%$$

$$= \frac{1}{5} \rightarrow P \quad = \frac{1}{10} \rightarrow L \quad = \frac{1}{4} \rightarrow L$$

$$S.P._1 = 6 \quad S.P._2 = 9 \quad S.P._3 = 3$$

According to the question

$$S.P._1 = S.P._2 = S.P._3$$

$$C.P._1 = 5_{\times 6} \quad C.P._2 = 10_{\times 4} \quad C.P._3 = 4_{\times 12}$$

$$S.P._1 = 6_{\times 6} \quad S.P._2 = 9_{\times 4} \quad S.P._3 = 3_{\times 12}$$

$$C.P._1 = 30 \quad C.P._2 = 40 \quad C.P._3 = 48$$

$$(Total C.P. = 118)$$

$$S.P._1 = 36 \quad S.P._2 = 36 \quad S.P._3 = 36$$

$$P = 6/- \quad L = 14/- \quad L = 12/-$$

$$(Total S.P. = 108)$$

$$\text{Diff.} = -10 \times 6 - 60 \text{ (loss is 60)}$$

Hence C.P. too multiplied by 6
 $C.P._1 = 30_{\times 6} \quad C.P._2 = 40_{\times 6} \quad C.P._3 = 48_{\times 6}$
 $= 180, 240, 288$

45.3; **I** **II**
 $C.P. = 100$ $\frac{4}{2}$
equal
 $P/L - 1$ $+ 1_{\times 2}$
 $S.P. 9$ $5_{\times 1} - 19 \times 90 \rightarrow 1710$
 $90 = \text{profit}$

2nd Method:-

Ist	2nd
$P = 10\%$	$P = 25\%$
$\frac{1}{10} \rightarrow L$	$\frac{1}{4} \rightarrow P$
$C.P._1$	$C.P._1$

$S.P. = 9$	$S.P._2 = 5$
Given	

$C.P._1$	$S.P._2$
$C.P._1 = 10$	$C.P._2 = 4 \times 2 = 8$ (Total C.P. = 18)
$S.P._1 = 9$	$C.P._2 = 5 \times 2 = 10$ (Total S.P. = 19)

$$\text{Difference} = 19 - 18 \quad \downarrow \times 19 \\ = 1 \quad 1 \times 10$$

If difference 1×90 then $P = 1$

If S.P. = $19 \times 19 = 361$

$$\text{then, } P = \frac{1710 \times 1}{19}$$

Profit = 90

46.1;

Ist **2nd**

$$P = 20\% = \frac{1}{5} \rightarrow L \quad L\% = 50\% = \frac{1}{2} \rightarrow L$$

$$C.P. \leftarrow \text{same} \rightarrow S.P. = 1 \times 5 = 10$$

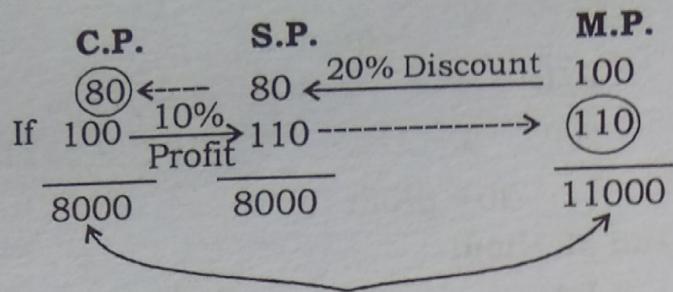
$$\text{Total C.P.} = 15 \times 500 \rightarrow 7500$$

$$\text{Total S.P.} = 11$$

$$L = 4 \times 500 \rightarrow 2000$$

If $15 \times 500 = 7500$ [C.P. given is 7500]
then 4 is also multiplied by 500 and thus
loss incurred is 2000

47.1;



[Rule of ratio followed see question 3
on page no. 93]

$$\text{Difference} = 3000$$

$$\therefore \% = \frac{3000}{\text{C.P.}} \times 100$$

$$= \frac{3000}{8000} \times 100 = 37\frac{1}{2}\%$$

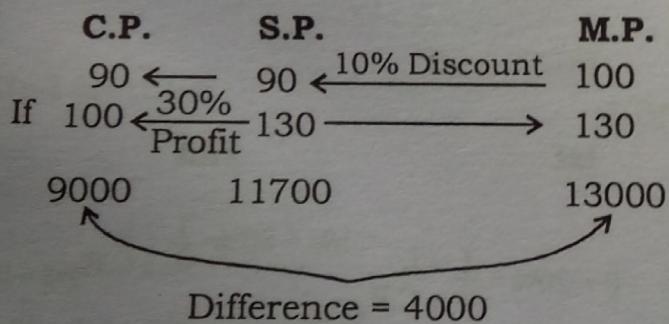
48.3; Short Trick:-

$$\text{C.P.} = 90$$

$$\text{M.P.} = 130$$

$$\frac{40}{90} \times 100 = 44\frac{4}{9}\%$$

48.3; Paramount Concept:-

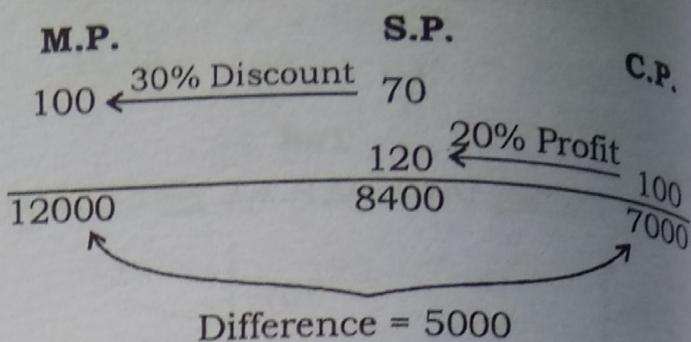


$$\text{Difference} = 4000$$

$$\% = \frac{\text{Difference}}{\text{C.P.}} \times 100$$

$$= \frac{4000}{9000} \times 100 = 44\frac{4}{9}\%$$

49.2;



$$\text{Difference} = 5000$$

$$\% = \frac{\text{Difference}}{\text{C.P.}} \times 100$$

$$\frac{5000}{7000} \times 100 = \frac{500}{7} = 71\frac{3}{7}\%$$

50.1; Let M.P. of 56 pens = 56/-

C.P. of the retailer for 70 pens = 56 (given)

M.P. of 56 pens = C.P. of 70 pens

C.P. of the retailer for 56 pens

$$= \frac{56 \times 56}{70} = 44.8/-$$

S.P. = 56 (as pens are sold on M.P.)

$$P\% = \frac{56 - 44.8}{44.8} \times 100$$

$$\frac{11.2}{44.8} \times 100 = 20\%$$

51.4; Let S.P. of 40 pens = 40/- \rightarrow C.P. of retailer

$$\text{M.P. of 40 pens} = \frac{40 \times 40}{36} = \frac{1600}{36} = \frac{400}{9}$$

$$\text{S.P. (after 1% discount)} = \frac{99}{100} \times \text{M.P.}$$

$$= \frac{99}{100} \times \frac{400}{9} = 11 \times 4 = 44/-$$

$$P = \frac{P}{C.P.} \times 100$$

$$\frac{44 - 40}{40} \times 100 = 10\%$$

52.5; Shopkeeper gives 1 item free with every 15 items means he is giving discount:-

$$= \frac{1}{(15+1)} \times 100$$

$$= \frac{1}{16} \times 100 = 6.25\%$$

and another discount of 4%

\therefore Equivalent discount = 4 + 6.25 -

$$\frac{4 \times 6.25}{100} = 10.25 - 0.25$$

equivalent discount = 10%

gain % = 35%

Now, Using formula:-

$$M.P. (1 - d\%) = C.P. (1 + g\%)$$

$$M.P. \left(\frac{90}{100} \right) = C.P. \left(\frac{135}{100} \right)$$

$$\therefore \frac{C.P.}{M.P.} = \frac{90}{135} = \frac{2}{3}$$

C.P. : M.P. = 2 : 3

53.5; Using formula:-

$$M.P. (1 - d\%) = C.P. (1 + g\%)$$

$$M.P. \left(\frac{80}{100} \right) = C.P. \left(\frac{120}{100} \right)$$

$$M.P.(80) = C.P.(120)$$

$$\frac{C.P.}{M.P.} = \frac{80}{120} \quad \text{(i)}$$

Now, 16 articles given in the cost of 12 articles

$$M.P. \text{ of one article} = \frac{\text{total}}{12} \quad \text{(ii)}$$

$$\text{Cost of one article} = \frac{\text{total}}{16} \quad \text{(iii)}$$

For one article :-

$$\frac{C.P.}{M.P.} = \frac{\frac{80}{16}}{\frac{120}{12}} \Rightarrow \frac{5}{10}$$

$$C.P. : M.P. = 1 : 2$$

54.1; Discount of 25% offered on M.P.
= ₹ 117

$$\text{After discount} = \frac{75}{100} \times 117$$

$$= ₹ 87.75 / \text{bottel}$$

$$\begin{aligned} \text{Cost of 12 dozen bottels} \\ = 87.75 \times 12 \times 12 \\ = 12636 \end{aligned}$$

$$\therefore \text{Cost of one bottel} = \frac{12636}{156} = ₹ 81$$

55.3; Let the C.P. of 1 article is ₹ 100
C.P. of 16 articles = 1600

$$\text{S.P. of 15 articles} = \frac{100+P\%}{100} \times \text{C.P.}$$

$$= \frac{100+35}{100} \times 1600$$

$$\frac{135}{100} \times 1600 = 2160$$

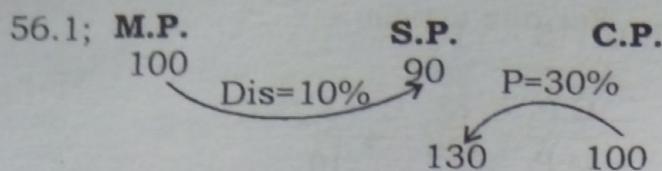
$$\text{S.P. of 1 article} = \frac{2160}{15} = 144$$

$$4\% = \frac{1 \rightarrow \text{Discount}}{25 \rightarrow \text{M.P.}} \quad \begin{array}{l} \text{S.P.} \rightarrow 25-1 \\ = 24 \end{array}$$

$$\downarrow \times 6 \quad \downarrow \times 6$$

$$150 \quad 144$$

($24 \times 6 = 144$, hence 25 is also multiplied by 6. $25 \times 6 = 150$)
 $150 - 100 = 50\%$ above C.P. = 50%



By rule of ratio -

$$100 \rightarrow 90 \rightarrow 90 \\ \begin{array}{c} 130 \leftarrow 130 \leftarrow 100 \\ \hline 13000 \quad 11700 \quad 9000 \end{array}$$

$$130 \quad 117 \quad 90$$

D = 5% $\rightarrow 122.5/-$

$$P\% = \frac{122.5 - 90}{90} \times 100$$

$$= \frac{33.5}{90} \times 100 = 37.2\%$$

57.2; M.P. 30

25 dis. \rightarrow S.P. 21
+ 1.5 (ball)
 \rightarrow C.P. 21

P = 20%

$$C.P. = \frac{100}{100 + P\%} \times S.P.$$

$$C.P. = \frac{100}{120} \times 21 = 17.5/-$$

58.5; M.P. 160

Ist Dis. = 10%
= 16%
 $\rightarrow 144$
2nd Dis. = ?
 $\rightarrow 122.40$

2nd Discount = 21.60/-

$$D\% = \frac{21.60}{144} \times 100 = 15\%$$

59.3;

M.P. 65
Dis. = 4%
= 2.60/-
 $\rightarrow 62.40/-$
D = k%
 $\rightarrow 56.16/-$

$$D = 6.24/- \quad D = \frac{6.24}{62.40} \times 100 = 10\%$$

60.2; Let the initial stock is 120

$$\text{Remaining} = 1 - \left(\frac{2}{3} + \frac{1}{4} \right) = \frac{1}{12}$$

$$120 \times \frac{2}{3} \times \frac{130}{100} + 120 \times \frac{1}{4} \times \frac{116}{100}$$

S.P. on 2/3rd of 120 with 30% profit S.P. on 1/4th of 120 with 16% profit

$$+ 120 \times \frac{1}{12} \times \frac{112}{100}$$

S.P. remaining 1/12th of 120 with 12% part

$$= 104 + 34.8 + 11.2$$

$$= 150$$

$$\text{Profit} = (150 - 120) = 30$$

If P is 30 \rightarrow 120 is the stock

If P is 1 \rightarrow 4 is the stock

If P is 75 \rightarrow 300 is the stock

61.1; C.P. = 100

M.P. = 120

$$D = \frac{15}{100} \times 120 = 18\%$$

$$S.P. = 102$$

$$P\% = \frac{P}{C.P.} \times 100$$

$$= \frac{2}{100} \times 100 = 2\%$$

62.2;

M.P. 100
S.P. 90
C.P. $\frac{100}{112} \times 90 \rightarrow C.P. = \frac{100}{100+P\%} \times S.P.$

$$C.P. = M.P.$$

$$= \frac{100 \times 90}{112} : 100$$

$$90 : 112$$

$$45 : 56$$

63.1; $D = 25\%$ $P = 20\%$

$M.P.$ 100	$S.P.$ 75	$C.P.$ $\frac{100}{120} \times 75$ $= 62.5$
---------------	--------------	---

$$M.P. - C.P. = 37.5$$

$$\frac{37.5}{62.5} \times 100 = 60\%$$

64.2; $D = 10\%$ $P = 8\%$

$M.P.$ 480	$S.P.$ 432	$C.P.$ $\frac{100}{108} \times 432 = 400$
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If no discount is allowed then $S.P. = M.P.$

$$C.P. = 400$$

$$S.P. = 480$$

$$P = 80\%$$

$$P\% = \frac{80}{400} \times 100 = 20\%$$

64.2; Paramount Concept:-

$$\frac{90 \times 480}{108} = C.P. = 400$$

No discount then,

$$\frac{80 \times 100}{400} = 20\%$$

65.1; Paramount Concept:-

$$\begin{array}{r} 38 \\ 95 \quad 133 \\ 38 \\ \hline 95 \end{array}$$

$$\frac{38}{95} \times 100 = 40\%$$

66.2; $S.P.$ of 12 marbles = 1

$$S.P. \text{ of 1 marble} = \frac{1}{12}$$

$$C.P. = \frac{100}{100 - L\%} \times S.P.$$

$$\frac{100}{80} \times \frac{1}{12} = \frac{100}{80 \times 12} = \frac{5}{48}$$

Now to gain 20%

$$S.P. \text{ of 1 marble} = \frac{100 + P\%}{100} \times C.P.$$

$$\frac{120}{100} \times \frac{5}{48} = \frac{1}{8}$$

Hence marbles sold for 1/- is 8.

67.3; Paramount Concept:-

$$\begin{array}{ccc} -20\% & & +30\% \\ 100 & \downarrow & 80 \\ 400 & & \\ & \downarrow & \\ & 104 & \\ & \downarrow & \\ & 416 & \end{array}$$

(If $104 \times 4 = 416$ then 100 is also multiplied by 4)

68.4; $10 \quad 15$

$$\begin{array}{c} 13\frac{8}{39} \\ : \\ 14 \quad 25 \\ \text{difference} \end{array}$$

$$P\% = \frac{P}{C.P.} \times 100$$

$$\begin{array}{l} \text{Profit on whole} \quad \frac{51.50 \times 100}{390} = 13\frac{8}{39}\% \\ (14 + 25) = 390 \\ 1 = 10 \\ 11 = 110 \end{array}$$

69.4; He gives after discount = $\frac{80 \times 120}{100} = 96$

Promise is that he will provide 96 cm but he gives = 80 cm
 $P = 96 - 80 = 16$

$$\therefore P\% = \frac{16 \times 100}{80} = 20\%$$

70.3;

$$\begin{array}{ccc} 25\% & & \\ \swarrow & & \searrow \\ 100/- & & 125/- \\ \downarrow & & \downarrow \\ 80/- & & 104/- \\ & & \text{difference} = 21/- \\ & & 30\% \end{array}$$

If diff. = 21/- C.P. = 100
but diff. given is 10.50/-

$$\text{Then } C.P. = \frac{100 \times 10.50}{21} = 50/-$$

10. Manoj deposited ₹ 29400 for 6 years at a simple interest. He got ₹ 4200 as interest after 6 years. The annual rate of interest was
- (1) $2\frac{8}{21}\%$ (2) $2\frac{7}{20}\%$
 (3) $3\frac{8}{21}\%$ (4) $4\frac{8}{21}\%$
- (5) None of these
11. A sum of money, at simple interest, triples itself in 15 years. It will become 5 times of itself in
- (1) 40 years (2) 36 years
 (3) 30 years (4) 25 years (5) None of these
12. Simple interest accrued on an amount in 8 years @ 12 % p.a. is ₹ 5,520. What is the principal amount?
- (1) ₹ 5,750 (2) ₹ 8,500
 (3) ₹ 5,650 (4) ₹ 8,250
 (5) None of these
13. An amount of ₹ 45,000 becomes ₹ 77,400 on simple interest in eight years. What is the rate of interest % p.a.?
- (1) 9 (2) 11
 (3) 8 (4) 10.5
 (5) None of these
14. Mr. Sharma takes loan of ₹ 25,000 and repays an amount of ₹ 31,000 at the end of 2 years. What is the rate of simple interest at which he repays the loan?
- (1) 8 % p.a. (2) 6 % p.a.
 (3) 12 % p.a. (4) 9 % p.a.
 (5) None of these
15. The interest earned on ₹ 15,000 in three years at simple interest is ₹ 5,400. Find the rate percent per annum?
- (1) 11.5 (2) 12.5
 (3) 15 (4) 12
 (5) None of these
16. What would be the simple interest obtained on amount of ₹ 8,930 at the rate of 8 % p.a. after 5 years?
- (1) ₹ 5,413 (2) ₹ 2,678
 (3) ₹ 3,572 (4) ₹ 4,752
 (5) None of these
17. Ms. Vishakha deposits an amount of ₹ 35,800 to obtain a simple interest at the rate of 15 % p.a. for 4 years. What total amount will Ms. Vishakha get at the end of 4 years?
- (1) ₹ 45,680 (2) ₹ 39,880
 (3) ₹ 21,480 (4) ₹ 57,280
 (5) None of these
18. Shilpa invests a certain amount at the rate of 6 % p.a. for 5 years. If she obtains a simple interest of ₹ 8,490 at the end of 5 years, how much amount did Shilpa invest?
- (1) ₹ 25,000 (2) ₹ 28,500
 (3) ₹ 30,000 (4) ₹ 36,790
 (5) None of these
19. What would be the simple interest obtained on an amount of ₹ 8,435 at the rate of 12 % p.a. after 4 years?
- (1) ₹ 4480.8 (2) ₹ 4048.8
 (3) ₹ 4246.8 (4) ₹ 4882.8
 (5) None of these
20. The simple interest accrued on an amount of ₹ 10,530 at the end of 5 years is ₹ 6,318. What is the rate of interest % p.a.?
- (1) 8 (2) 14
 (3) 10 (4) 12
 (5) None of these
21. What would be the simple interest obtained on an amount of ₹ 6,535 at the rate of 10 % p.a. (percent per annum) after 6 years?
- (1) ₹ 3414 (2) ₹ 3921
 (3) ₹ 3807 (4) ₹ 3149
 (5) None of these
22. What would be the simple interest obtained on an amount of ₹ 7055 at the rate of 15 % p.a. for 6 years?
- (1) ₹ 6689.50 (2) ₹ 6,529
 (3) ₹ 6,469 (4) ₹ 6349.50
 (5) None of these
23. A sum fetches simple interest of ₹ 708.75 at the rate of 12.5 % p.a. in 10 years. What is the sum?
- (1) ₹ 885.95 (2) ₹ 567
 (3) ₹ 5,670 (4) Can't be determined
 (5) None of these

24. Kirti took a loan at simple interest rate of 6% in the first year with an increase of 0.5% in each subsequent year. She paid interest of ₹ 3,375 after four years. How much loan did she take?
 (1) ₹12,500 (2) ₹ 33,250
 (3) ₹ 15,800
 (4) Cannot be determined
 (5) None of these
25. An amount doubles itself in 5 years with simple interest. What is the rate of interest % p.a.?
 (1) 20% (2) 35%
 (3) 25%
 (4) Cannot be determined
 (5) None of these
26. Suhit borrowed a sum of ₹ 6,300 from Vikas at the rate of 14% for 3 years. He then added some more money to the borrowed sum and lent it to Mohit at the rate of 16% of simple interest for the same time. If Suhit gained ₹ 618 in the whole transaction, then what sum did he lend to Mohit?
 (1) ₹ 7,000 (2) ₹ 6,800
 (3) ₹ 7,200
 (4) Cannot be determined
 (5) None of these
27. Vishwas borrowed a total amount of ₹ 30,000, a part of it on simple interest rate of 12 % p.a. and remaining on simple interest rate of 10 %p.a. If at the end of 2 years he paid in all ₹ 36,480 to settle the loan amount, what was the amount borrowed at 12 % p.a.?
 (1) ₹ 16,000 (2) ₹ 18,000
 (3) ₹ 17,500 (4) ₹12,000
 (5) None of these
28. A sum of money doubles itself in 10 years at simple interest. What is the rate of interest?
 (1) 10% (2) 20%
 (3) 25% (4) 30%
 (5) None of these
29. In what times does a sum of money become four times if rate of interest is 5% per annum?
 (1) 40 yrs (2) 50 yrs
 (3) 60 year (4) 70 yrs
 (5) None of these
30. A certain sum of money amounts to ₹ 756 in 2 yrs and to ₹ 873 in 3.5 yrs. Find the sum and the rate of interest.
 (1) ₹ 600, 13% p.a.
 (2) ₹ 800, 15% p.a.
 (3) ₹ 700, 14% p.a.
 (4) ₹ 600, 12% p.a.
 (5) None of these
31. A sum of money doubles itself in 7 yrs. In how many years will it become four fold?
 (1) 19 yrs (2) 21 yrs
 (3) 23 yrs (4) 25 yrs
 (5) None of these
32. A certain sum of money amounted to ₹ 575 at 5% in a time in which ₹ 750 amounted to ₹ 840 at 4%. If the rate of interest is simple, find the sum.
 (1) ₹ 500 (2) ₹ 600
 (3) ₹ 700 (4) ₹ 800
 (5) None of these
33. A person lent a certain sum of money at 4% simple interest; and in 8 years the interest amounted to ₹ 340 less than the sum lent. Find the sum lent.
 (1) ₹ 300 (2) ₹ 500
 (3) ₹ 700
 (4) Can't be determined
 (5) None of these
34. The simple interest on ₹ 1650 will be less than the interest on ₹1800 at 4% simple interest by ₹ 30. Find the time.
 (1) 3 yrs (2) 4 yrs
 (3) 5 yrs (4) 6 yrs
 (5) None of these
35. Two equal amounts of money are deposited in two banks each at 15% per annum for 3.5 yrs and 5 yrs respectively. If the difference between their interests is ₹144, find each sum.
 (1) ₹ 640 (2) ₹ 680
 (3) ₹ 720 (4) ₹ 740
 (5) None of these
36. The simple interest on a certain sum of money at 4% per annum for 4 yrs is ₹ 80 more than the interest on the same sum for 3 yrs at 5% per annum. Find the sum.
 (1) ₹ 6000 (2) ₹ 8000
 (3) ₹ 10000 (4) ₹ 12000
 (5) None of these

37. The interest rate of a private bank is 12% per annum. A customer deposits ₹ 12,000 in that bank. After how many years will his deposit become ₹ 18,000?
- 4 years
 - 4 years 6 months
 - 6 years
 - Can't be determined
 - None of these
38. A person invests money in three different schemes for 6 years, 10 years and 12 years at 10%, 12% and 15% simple interest respectively. At the completion of each scheme, he gets the same interest. The ratio of his investments is—
- 6 : 3 : 2
 - 2 : 3 : 4
 - 3 : 4 : 6
 - 3 : 4 : 2
 - None of these
39. If ₹ 64 amounts to ₹ 83.20 in 2 years, what will ₹ 86 amount to in 4 years at the same rate percent per annum?
- ₹ 132.50
 - ₹ 135.60
 - ₹ 137.60
 - Can't be determined
 - None of these
40. A money-lender finds that due to a fall in the rate of interest from 13% to $12\frac{1}{2}\%$, his yearly income diminishes by ₹ 104. What is his capital?
- ₹ 20800
 - ₹ 32800
 - ₹ 34600
 - ₹ 36400
 - None of these
41. ₹ 800 amounts to ₹ 920 in 3 years at simple interest. If the interest rate is increased by 3%, then what will be the total amount?
- ₹ 982
 - ₹ 992
 - ₹ 960
 - ₹ 964
 - None of these
42. A lent ₹ 600 to B for 2 years and ₹ 150 to C for 4 years and received altogether from both ₹ 90 as simple interest. The rate of interest is—
- 3%
 - 4%
 - 5%
 - 6%
 - None of these
43. The difference between the interest received from two different banks on ₹ 500 for 2 years is ₹ 2.50. The difference between their rates is—
- 0.21%
 - 0.22%
 - 0.25%
 - 0.27%
 - None of these
44. The rate of interest on a sum of money is 4% per annum for the first 2 years, 6% per annum for the next 4 years and 8% per annum for the period beyond 6 years. If the simple interest accrued by the sum for a total period of 9 years is ₹ 1120, what is the sum?
- ₹ 2000
 - ₹ 2200
 - ₹ 2400
 - ₹ 2500
 - None of these
45. A certain sum of money amounts to ₹ 2613 in 6 yrs at 5% per annum. In how many years will it amount to ₹ 3015 at the same rate?
- 5 yrs
 - 10 yrs
 - 15 yrs
 - 20 yrs
 - None of these
46. Some amount out of ₹ 7000 was lent at 6% per annum and the remaining at 4% per annum. If the total simple interest from both the fractions in 5 yrs was ₹ 1600, find the sum lent at 6% per annum.
- ₹ 1200
 - ₹ 1500
 - ₹ 1800
 - ₹ 2000
 - None of these
47. A certain sum at certain rate % per annum simple interest becomes ₹ 2100 in 2 years and ₹ 2250 in 5 years. The principal and rate of interest are—
- ₹ 1800; 3%
 - ₹ 1800; 5%
 - ₹ 2000; 3%
 - ₹ 2000; 2.5%
 - None of these