PG-DAC FEB 25 APTITUDE QUESTION BANK

Topic: Profit & Loss , Percentage

If an article is sold at a loss of 25%, and the selling price is ₹450, find the cost price.
a) ₹500
b) ₹550
c) ₹600
d) ₹650

A person bought an item for ₹1200 and sold it for ₹1440. What is the profit percentage?
a) 10%
b) 15%
c) 20%
d) 25%

If the selling price of an item is ₹960 and the cost price is ₹800, what is the profit percentage?
a) 15%
b) 20%
c) 25%
d) 30%

A shopkeeper sells a fan at ₹1200 with a loss of 20%. Find the cost price.
a) ₹1400
b) ₹1500
c) ₹1600
d) ₹1700

If the cost price of an article is ₹400 and it is sold for ₹480, what is the profit percentage?
a) 15%
b) 20%
c) 25%
d) 30%

A trader gives two successive discounts of 20% and 10%. Find the net discount percentage.
a) 28%
b) 30%
c) 32%
d) 36%

A man sold a shirt for ₹800 after giving a 20% discount. Find the marked price.
a) ₹900
b) ₹1000
c) ₹1100
d) ₹1200

A watch is sold for ₹1800 with a 25% profit. Find the cost price.
a) ₹1200
b) ₹1300

c) ₹1400
d) ₹1500

A shopkeeper marks an article at ₹1500 and allows a 10% discount. Find the selling price.
a) ₹1300
b) ₹1350
c) ₹1400
d) ₹1450

A merchant buys 10 pens for ₹150 and sells them for ₹200. What is his profit percentage?
a) 25%
b) 30%
c) 33.33%
d) 40%

A trader gives a 15% discount on an item and still makes a profit of 20%. What is the markup percentage?
a) 30%
b) 35%
c) 40%
d) 45%

A table is sold for ₹2250 at a 10% profit. What is the cost price?
a) ₹1800
b) ₹1900
c) ₹2000
d) ₹2100

If a shopkeeper wants a profit of 25% on an item that costs ₹800, what should be the selling price?
a) ₹900
b) ₹1000
c) ₹1050
d) ₹1100

A refrigerator is sold for ₹15,000 at a loss of 10%. Find the cost price.
a) ₹16,500
b) ₹17,000
c) ₹16,000
d) ₹16,800

An article is marked 50% above the cost price and then sold at a discount of 20%. What is the profit percentage?
a) 20%
b) 25%
c) 30%
d) 35%

A dealer makes a profit of 12% after allowing a 5% discount. Find the marked price of an article whose cost price is ₹400.
a) ₹500
b) ₹510
c) ₹520

d) ₹530

A book is bought for ₹480 and sold for ₹576. What is the profit percentage?
a) 15%
b) 18%
c) 20%
d) 25%

If a profit of ₹50 is made on an article whose cost price is ₹500, what is the profit percentage?
a) 8%
b) 9%
c) 10%
d) 12%

A shopkeeper sells a cycle at a 15% profit and the selling price is ₹2300. Find the cost price.
a) ₹1900
b) ₹2000
c) ₹2100
d) ₹2200

The cost price of an article is ₹750 and it is sold at ₹900. What is the gain percentage?
a) 15%
b) 18%
c) 20%
d) 25%

A man sells an item at 20% loss. If the selling price is ₹640, find the cost price.
a) ₹700
b) ₹750
c) ₹800
d) ₹850

A trader sells a mobile phone for ₹9600 at a profit of 20%. Find the cost price.
a) ₹7500
b) ₹8000
c) ₹8200
d) ₹8500

A shopkeeper sells an item for ₹500 at a 20% profit. What was the cost price?
a) ₹400
b) ₹410
c) ₹420
d) ₹430

A man buys two articles for ₹1500 each. He sells one at a 20% profit and the other at a 10% loss. Find his net profit/loss.
a) 5% loss
b) 5% profit
c) 10% profit
d) No profit, no loss

A trader sells an article at ₹1250 with a loss of 12%. Find the cost price.
a) ₹1300
b) ₹1400
c) ₹1450
d) ₹1500

Find the profit percent earned after selling an article at a doubled rate for half quantity.
a) 200%
b) 300%
c) 400%
d) 450%

A number is multiplied by 20% of itself, the sum is then doubled. If the final value is 490, find the number.
a) 35
b) 40
c) 45
d) 50

An article is sold at 20% less than its cost price. If the selling cost is 50 rupees and the selling cost is 5% of the selling price, find the loss. (Selling cost here is the expense occurred to sell the article, it is levied on the seller)
a) 150 rupees
b) 200 rupees
c) 250 rupees
d) 300 rupees

If the seller sells half of his goods at 20% loss and the rest of his goods at 50% profit, find the profit percentage on the entire transaction.
a) 12% profit
b) 15% profit
c) 20% profit
d) 25% profit

The expense of selling an article, worth rupees 6000, is 50 rupees. If the selling expenses is 10% more than the loss, find the loss percentage.
a) 7.5%
b) 8.33%
c) 9.09%
d) 10%

The profit on selling 1 article is equal to the cost price of 2 such articles. Find the profit percentage.
a) 100%
b) 150%
c) 200%
d) 225%

The initial price of an article is decreased by 20% but the selling price remains constant. If the initial profit was 500 rupees, find the new profit. It is known the initial profit percent was 20% of cost price

a) 800 rupees
b) 900 rupees
c) 1000 rupees
d) 1250 rupees

The price of a pair of slippers is decreased by 10% and the selling price is constant. If the initial profit percentage was equal to 25%, find the new profit percentage.
a) 35%
b) 38.8%
c) 40%
d) 42%

The cost price of an article is doubled, and the selling price is made half. If the initial profit percentage was 500%, find the profit percentage now.
a) 25%
b) 50%
c) 100%
d) 250%

A shopkeeper increases the price of sugar by 25%. By how much a family should decrease their consumption to maintain the regular price?
a) 25% increase
b) 25% decrease
c) 20% increase
d) 20% decrease

The profit on selling 15 articles is equal to the cost price of 2 articles. Find the profit percentage.
a) 11.11%
b) 12.22%
c) 13.33%
d) 14.44%

40% of a number a is 50% of a number b, find the value of a : b.
a) 2 : 3
b) 1 : 4
c) 1 : 5
d) 3 : 5

The marked price of an article is 5 times the discount. Find the selling price in terms of discount.
a) 2.5 times the discount
b) 3.5 times the discount
c) 4 times the discount
d) 5 times the discount

Solve for x; x = 20% of 12% of 120% of 6250.
a) 270
b) 225
c) 200
d) 180

A shopkeeper purchased an article for 500 rupees. At what price should he mark the article to allow a discount of 35% and still earn 100% profit.
a) 1539 rupees
b) 1593 rupees
c) 1555 rupees
d) 1599 rupees

A is 25% more than b. By what percent is b smaller than a?
a) 13.33%
b) 20%
c) 22%
d) 30%

If the discount is twice the cost price and the marked price is 10000, find the selling price. No profit or loss was made.
a) 1111.11 rupees
b) 3333.33 rupees
c) 5555.55 rupees
d) 7777.77 rupees

The cost price of an article is 30% less than the selling price. The discount is 40% of the selling price. If the marked price is 12600 rupees, find the cost price.
a) 6300 rupees
b) 10000 rupees
c) 8400 rupees
d) 5600 rupees

If 33.33% of a number is 20 more than 16.66% of the number, find 120% of the number.
a) 121
b) 139
c) 144
d) 169

Find the number if, 20% of a number is 20 more than 20% of another number 20.
a) 100
b) 110
c) 120
d) 125

A number if doubled, then tripled and this process is repeated twice. What is the percentage change?
a) 3500%
b) 3000%
c) 2500%
d) 1750%

By how much should 234 be reduced to make it 65% of itself?
a) 80.9
b) 81.9
c) 82.9
d) 83.9

What is 90% of 900% of 9000% of 9?
a) 7290
b) 729
c) 6156
d) 6561

Out of 25 employees of a company, 13 are set of and the salaries of rest of the employees is increased by 24%. Find the total increase of decrease in company's expenditure.
a) 40.48% decreased
b) 40.44% increased
c) 44.48% decreased
d) 44.84% increased

Zayn bought tickets to concert for Rs. 3500. He wants to sell them at a discount of 15%. What is the discount in Rs.?
a) Rs.1525
b) Rs.350
c) Rs.525
d) Rs.1050

Assignment No:- 02

Q1]

→ let C.P be 100, then S.P will be 75, But real S.P is 450, so:

$$100 \longrightarrow 75$$
$$x \longrightarrow 450$$

$$x = \frac{450 \times 100}{75} = 600$$

C.P = 600 (Ans = c)

Q2]

→ C.P = 1200 S.P = 1440

$$P\% = \frac{-1200 + 1440}{1200} \times 100$$

$$= \frac{240}{12} = 20\% \text{ (Ans = c)}$$

Q3]

→ S.P = 960 C.P = 800

$$P\% = \frac{960 - 800}{800} \times 100$$

$$= \frac{160}{8} = 20\% \text{ (Ans = b)}$$

Q4]

→ S.P = 1200 L% = 20% C.P = ?

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

$$20 = \frac{x - 1200}{x} \times 100$$

$$x = \frac{x - 1200}{20} \times \frac{5}{100}$$

$$x = 5x - 6000$$

$$4x = 6000$$

C.P = $x = 1500$ (Ans = b)

Q5]

→ C.P = 400 S.P = 480

$$P\% = \frac{80}{400} \times 100 = 20\%$$ (Ans = b)

Q6]

→

S (↑↓)% = 20% + 10% + 2

S % = 32% (Ans = c)

Q7]

→ S.P = 800 ~~M.P~~ D% = 20% M.P = ?

$$D\% = \frac{M.P - S.P}{M.P} \times 100$$

$$20 = \frac{x - 800}{x} \times 100$$

$$20x = 100x - 80000$$

$$80x = 80000$$

$$\underline{x = 1000 \quad (\text{Ans} = b)}$$

Q8]

→ SP = 1800 P% = 25 C.P = ?

$$P\% = \frac{-x + 1800}{x} \times 100$$

$$25x = -100x + 180000$$

$$125x = 180000$$

$$x = \frac{180000}{125} \quad (72000)$$

$$\underline{x = 1440}$$

Q9]

→ M.P = 1500 D% = 10% S.P = ?

$$S.P = 90\% \, 1500$$

$$= 90 \times 15$$

$$\underline{S.P = 1350 \quad (\text{Ans} = b)}$$

Q10]

→ C.P = 150 S.P = 200 P% = ?

$$P\% = \frac{200 - 150}{150} \times 100$$

$$= \frac{50}{\frac{150}{3}} \times 100^2 = 100/3 \simeq \underline{33.33\% \quad (\text{Ans} = c)}$$

Q 11]

→ D% = 15% P% = 20% M.P% = ?

let C.P = 100 then S.P = 120

S.P = M.P - 15% of M.P

S.P = 85% MP

$M.P = \frac{120}{85} \times 100$

M.P = 141.18

M.P% = ((141.18 - 100)/100) × 100

M.P% = 41.18%

Q 12]

→ P% = 12% D% = 5% M.P = ? CP = 400

S.P = 112% 400

S.P = 448

$D\% = \frac{M.P - S.P}{M.P} \times 100$

$5 = \frac{x - 448}{x} \times 100$

5x = 100x - 44800

95x = 44800

x = 44800/95

M.P = x = 471.58 €.

Q13]

→ C.P = 480 S.P = 576 P% = ?

$$P\% = \frac{96}{480} \times 100 = 20\% \quad (Ans = c)$$

Q14]

→ C.P = 500 P = 50 P% = ?

$$\therefore S.P = C.P + P = 550$$

$$P\% = \frac{50}{500} \times 100$$

$$P\% = 10\% \quad (Ans = c)$$

Q15]

→ P% = 15% S.P = 2300 CP = ?

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

$$15x = (2300 - x)100$$
$$3x = (2300 - x)\,20$$
$$3x = 46000 - 20x$$
$$23x = 46000$$
$$x = 46000/23$$
$$x = C.P = 2000 \quad (Ans = b)$$

Q16]

→ C.P = 750 S.P = 900 P% = ?

$$P\% = \frac{150}{750} \times 100$$

$$P\% = 20\% \quad (Ans = c)$$

Q17]

→ L% = 20% S.P = 640 C.P = ?

$$L\% = \frac{x - 640}{x} \times 100$$

$$20x = 100x - 64000$$

$$80x = 64000$$

$$x = 64000/80$$

$$x = 800$$

$$C.P = x = 800 \quad (Ans = c)$$

Q18]

→ S.P = 9600 P% = 20% CP = ? (x)

$$P\% = \frac{9600 - x}{x} \times 100$$

$$20x = 960000 - 100x$$

$$120x = 960000$$

$$x = 960000/120$$

$$x = 8000$$

$$C.P = x = 8000 \quad (Ans = b)$$

Q19]

→ S.P = 500 P% = 20% C.P = ? (x)

$$P\% = \frac{500 - x}{x} \times 100$$

$$20x = 50000 - 100x$$

$$120x = 50000$$

$$x = 5000/12 \approx 416.67 = C.P$$

Q20]

→ $C.P_1 = C.P_2 = 1500$ $P_1\% = 20\%$ $L_2\% = 10\%$

~~Article~~ 1 =

$S.P_1 = 120\%$ of 1500

$= 1800$

$S.P_2 = 90\%$ of 1500

$= 1350$

Total CP = 3000

Total SP = 3150

$$L\%/P\% = \frac{150}{3000} \times 100$$

P% = 5% profit (Ans = b)

Q 21]

→ S.P = 1250 12% = 12% C.P = ? (x)

$12x = (x - 1250)100$

$12x = 100x - 125000$

$88x = 125000$

$x = 125000/88$

$C.P = x = 1420.45$

Q 22]

→ Prev Quantity = 100 Price = 100

After Quantity = 50 Price = 200

$P\% = \frac{200 - 50}{50} \times \frac{100}{2}$

$= 150 \times 2$

$P\% = 300\%$ (Ans = b)

Q 23]

→ let n be number

$n * \left(\frac{n * 20}{100}\right) = 0.2n^2$

$2(0.2n^2) = 490$

$0.4n^2 = 490$

$n^2 = \frac{490}{4} \times 100$

$n^2 = 12.25 \times 100$

$n^2 = 1225$

$n = 35$ (Ans = a)

Q24]

→ L% = 20% ~~S.P = 50~~

S.P = 50 + (5% 50)

= 50 + 9

5% SP = S.C

5% SP = 50

$SP = \frac{50}{5} \times 100$

SP = 1000

~~L = L% C.P~~

$L\% = \frac{CP - SP}{CP} \times 100$

$20 = \frac{x - 1000}{x} \times 10/5$

~~20x = 100x - 1000~~

$x = 5x - 5000$

$4x = 5000$

$x = 5000/4$

$x = 1250$

L = CP - SP

= 1250 - 1000

L = 250 rupees (Ans = c)

Q25]

→ ~~CP~~ CP = 100 $CP_1 = 50$ $CP_2 = 50$

$SP_1 = 840$ $SP_2 = 75$

Total SP = 115

$P\% = \frac{115 - 100}{100} \times 100$

P% = 15% profit (Ans = b)

Q26]

→ ~~S.P = 6060~~

Selling expense = L + 10%L

$50 = 1.1L$

$L = 45.45$ rupees

$L\% = \left(\frac{45.45}{6000}\right) \times 100 \simeq 0.7575\%$

$L\% \simeq 0.76\%$

Q27]

→ $P\% = \frac{300 - 100}{100} \times 100$

$P\% = 200\%$ (Ans = c)

Q28]

→ c

$P = SP - CP$

$500 = 20\%\ CP$

Initial $CP = \frac{500}{20} \times 100$

$= 2500$

~~Initial~~ SP $= 3000 \times (2500 + 500)$

New CP = CP − 20% CP

$= 2500 - 500$

$= 2000$

New Profit = $\frac{3000 - 2000}{2000} \times 100$

New Profit = 1000 (Ans = c)

Q29]

→ C.P$_1$ = 100 CP$_2$ = 90 SP$_1$ = SP$_2$

SP$_1$ = 125 = SP$_2$ (25% profit)

New Profit = $\frac{125 - 90}{90} \times 100$

New Profit = $\frac{350}{9}$ = 38.8% (Ans = b)

Q30]

→ CP$_1$ = 100 → CP$_2$ = 200 SP$_1$ = 600 SP$_2$ = 300

P% = $\frac{300 - 200}{100} \times 100$

P% = 100% (Ans = c)

Q31]

→ CP$_1$ = 100 CP$_2$ = 125 $

Expenditure before : 100X

New Consumption : Y kg

125Y = 100X

Y = 0.8X

Decrease in consumption = X - Y

= X - 0.8X = 0.2X

$35x = 100x - 100000$

$65x = 100000$

$x = 100000/65$

$= 1538.4$

M.P = $x \approx 1539$ (Ans = a)

Q37]

⟶ let B be 100, then A = 125

$$\text{Ans} = \frac{25}{125} \times 100$$

Ans = 20% (Ans = b)

Q38]

→ D = 2C MP = 10000 SP = ?

CP = SP

D = MP - SP

2C = MP - CP

2C = 10000 - C

3C = 10000

$C = \frac{10000}{3}$

C = S.P = 3333.33 rupees (Ans = b)

Q39]

~~SP = 100 CP = 70 D = 40%~~

MP = 12600 CP = 70% SP D = 40%

CP = ?

$D\% = \frac{MP - SP}{MP} \times 100$

$40 = \frac{12600 - x}{12600} \times 100$

5040 = 12600 - x

SP = x = ~~7650~~ 7560

CP = 70% 7560

= 7 × 756

CP = ~~5355~~ 5292

(Ans = d 5600 (closest))

Q40]

→ x

$33.33\%\, x = 20 + 16.66\%\, x$

$\frac{x}{3} = 20 + \frac{x}{6}$

$\frac{x}{3} - \frac{x}{6} = 20$

$\frac{2x - x}{6} = 20$

$x/6 = 20$

$x = 120$

$120\%\, x = 120\%\, 120 = 144$ (Ans = c)

Q41]

→ $20\%\, x = 20\%\, 20 + 20$

$\frac{x}{5} = \frac{20}{5} + 20$

$x = 5(4 + 20]$

$x = 120$ (Ans = c)

Q42]

→ 100 → 200 → 600 → 1200 → 3600

% change = $\frac{3600 - 100}{100} \times 100$

% change = 3500 % (Ans = a)

Q43]

→ $234 - x = \frac{65}{100} \times 234$

$\frac{65}{100} \times 234 = 152.1$

$\therefore 234 - x = 152.1$

$x = 81.9$ (Ans = b)

Q44]

→ $\frac{90}{100} \times \frac{90}{100} \times \frac{9000}{100} \times 9 = Ans$

Ans = 6561 (Ans = d)

Q45]

→ Initial expenditure = 25S

Sale of 13 employees = 13S

Remaining employees = 25 - 13 = 12

As Salary of 12 employees increase by 24%,

S + 0.24S = 1.24S

12 × 1.24S = 14.88S

Net change = 14.88S - 25S

= -10.12S

% Net change = $\left(\frac{-10.12S}{25S}\right) \times 100$

= -40.48%

% Net change = 40.48% decreased

Q46]

C.P = 3500 D% 15%

15% 3500 = D

D = Rs 525 (Ans = c)