Assignment-

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

Ans- c

loss% =25%

SP= 450

cp =(450*100)/(100-25) =600

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%

Ans- c

CP= 1200

SP= 1440

Profit % = ((SP-CP)*100)/CP =((1440-1200)*100)/1200 =(240*100)/1200 =20%

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%

Ans- b

CP= 800

SP= 960

Profit % = ((SP-CP)*100)/CP =((960-800)*100)/800 =(160*100)/800 =20%

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

Ans- b

loss% =20%

SP= 1200

cp =(1200*100)/(100-20) =1500

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%

Ans- b

CP= 400

SP= 480

Profit % = ((SP-CP)*100)/CP =((480-400)*100)/400 =(80*100)/400 =20%

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

Ans-A

A=20% B=10%

Discount= 20+10- ((20*10)/100)=30-2=28%

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

Ans- b

SP= 1800

Discount %=20%

Market price= (800*100)/(100-20) =80000/80 =1000

A watch is sold for ₹1800 with a 25% profit. Find the cost price.
a) ₹1200
b) ₹1300
c) ₹1400
d) ₹1500

Ans- c

Profit% =25%

SP= 1800

cp =(1800*100)/(100-25) =1440

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

Ans- B

MP=1500

Discount= 10%

SP= MP-((10*MP)/100)

= 1500- ((1500*10)/100) =1500-150 =1350

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%

Ans- C

CP=150

SP=200

Profit % = ((SP-CP)*100)/CP =((50)*100)/150 =(15*100)/800 =33.33%

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%

Ans- C

Profit= 20%

Discount%= 15%

Markup= ((P+D+((P*D)/100))/100)*CP = ((20+15+((20*15)/100))/100)*CP =35+3 =40%

A table is sold for ₹2250 at a 10% profit. What is the cost price?

a) ₹1800
b) ₹1900
c) ₹2000
d) ₹2100

Ans- C

SP=2250

profit%= 10%

CP=(2250*100)/(100+10) =2000

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

Ans-B

CP = 800

SP= CP+(25%of CP) = 800+((25*800)/100)=1000

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

Ans-D

SP = 15000

Loss% =10%

CP=((15000*100)/90) =16666.7

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%

Ans-A

MP=150% of CP

SP= 80% of MP

SP=150%*CP*80%

SP=1.5*0.8*CP =1.2CP = 20%

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

Ans-C

CP=400

Profit=12%

Discount=5%

0.95MP=1.12*400

MP =((1.12*400)/0.95) =472

A book is bought for ₹480 and sold for ₹576. What is the profit percentage?

a) 15%
b) 18%
c) 20%
d) 25%

Ans-C

CP=480

SP=576

Profit=(96/480)*100 = 20%

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%

Ans-C

CP= 500
Profit=50
Profit%=((50*100)/500) =10%

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

Ans- B

SP=2300
Profit%= 15%
SP=CP*(1+(15/100))
2300=CP*(115/100)
CP = 2300/1.15 =2000

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%

Ans-C

CP= 750
SP= 900
Profit%=((SP-CP)/CP)*100 = ((900-750)/750)*100 =20%

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

Ans-c

SP=640

Loss%=20%

CP=(SP/(1-(Loss%/100))) =640 /(1-0.2) =800

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

Ans-a

SP=500

Profit%=20%

CP=(SP/(1+(Loss%/100))) =500 /(1+0.2) =8000

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

Ans-a

SP= 500

profit %=20%

CP=500/1.2 =416.67

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

Ans-b

- CP of 1st article = ₹1500, sold at **20% profit**
- CP of 2nd article = ₹1500, sold at **10% loss**

Profit on 1st article:

Selling Price=1500×1.2=1800

Loss on 2nd article:

Price=1500×0.9=1350

Total CP:

1500+1500=30001500 + 1500 = 30001500+1500=3000

Total SP:

1800+1350=31501800 + 1350 = 31501800+1350=3150

Profit Percentage:=((3150 -3000)/3000)×100=5%

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

Ans-c
SP=1250
loss%=12%
CP=1250/(1-02)=1250/0.88=1420.45

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

Ans-b

Given:

- Selling price doubled
- Half quantity sold

Let's assume:

- Initial CP = ₹100 per unit
- Initial SP = ₹x per unit
- Initial profit % = ((x−100)/100)×100

Now, when the SP is doubled but only half quantity is sold, the new SP per unit is **2x**.

Since the same cost applies, new profit %:((2x−100)/100)×100 =300%

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

Ans- b

(X+0.2x)*2=490
1.2x * 2=490
2.4x=490
x=490/2.4 =40.83

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

Ans-c

SP=50
loss=20% of CP
SP=5% of SP

Let CP=x

SP=0.8x
50=0.05*0.8x
x=50/0.04 = 1250

Loss=1250-1000=250

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

Ans-b

Given:

- Half goods sold at **20% loss**
- Half goods sold at **50% profit**

Let CP of each half be **100**:

- Loss part: SP = **80**
- Profit part: SP = **150**

Total CP = 200,
Total SP = 230
Profit%= ((236-200)/200)*100=15%

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%

ANs-b
Given:

- Expense of selling = ₹50
- CP = ₹6000
- Selling expense = **10% more than the loss**

Let loss be **x**, then:

Selling expense=x+10%x=1.1x
1.1x=50
x=50/1.1 =45.45
Loss%=(45.45/6000)*100 =0.75%

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%

Ans-c

Given:

- Profit on selling 1 article = Cost Price of 2 such articles

Let CP = ₹x and profit = ₹2x.
Profit%=(2x/x)*100 =200%

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

Ans- b

Given:

- Initial CP = ₹x
- Initial profit = ₹500 (20% of CP)
- New CP = **80% of x**

Profit=500+20%×80%x
500 + 16%x = 500 + 400 = 900

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%
Ans-B

Given:

- Initial CP = ₹x
- Initial profit = **25%**
- New CP = **90% of x**

New profit percentage:

New Profit=(25/90)×100=38.8%

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%

ANs- b

Given:

- CP doubled
- SP halved
- Initial profit % = **500%**

Let **initial CP = ₹100**, so initial SP = **₹600**.

New CP = **₹200**, New SP = **₹300**

New Profit %=((300−200)/200)×100=50%

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

Ans-d

Given:

- Price increase = **25%**

To maintain the same cost:
New Consumption=100/125=80%
Decrease = **20%**

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%

Ans-c

Given:

- Profit on selling **15 articles** = Cost price of **2 articles**

Profit percentage: (2/15)×100=13.33%

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

Ans-a

Given:

- 40% of **a** = 50% of **b**

0.4a=0.5b
a/b=0.5/0.4=5/4=2:3

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

Ans-c

Given:

- Marked Price = **5 × Discount**

SP=Marked Price−Discount
SP=5D−D=4D

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

ANs-d

Given:

x=20%×12%×120%×6250x
x=0.2×0.12×1.2×6250x
x=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

Ans-a

Given:

- CP = **₹500**
- Profit = **100%**
- Discount = **35%**

Marked Price (MP):

MP×(1−0.35)= 1000
MPx 0.65=10000
MP=1538.46

Closest option: **₹1539**

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

Ans-b

Given:

- **A is 25% more than B**

Let **B = 100**, then **A = 125**

Decrease %=((125−100)/125)×100=20%

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

Ans-b

Given:

- Discount = **2 × CP**

- Marked Price = **₹10,000**
- No profit/loss

SP=10000−2CP

Since **SP = CP**, solving:

CP=10000/3=3333.33

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

ans-d

Given:

- Discount = **40% of SP**
- CP = **30% less than SP**
- Marked Price = **₹12,600**

SP=12600−0.4SP
SP = 12600×0.6=7560
CP=7560×0.7=5292CP = 7560

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

Ans-c

Given:

33.33%x=20+16.66%x
(1/3)x=20+(1/6)x

Solving,

x=120

120%x=144

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

Ans-c

Given:

20%x=20+20%×20
0.2x=20+4
x=120

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%

ANs-a

Given:
Repeatedly doubled and tripled twice:

(2×3)^2=36x
((36x−x)/x)×100=3500%

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

Ans-b

Given:
65% of itself

Reduction=234−0.65×234=81.9

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

Ans-d

90%×900%×9000%×9

0.9×9×90×900=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

Ans-a

Total Change=((13/25)×100)−((12/25)×24) =40.48%decrease

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

Ans-c

Discount=15%×3500=525