BOOST UP PDFS | Quantitative Aptitude | Profit & Loss (Easy Level Part-1)

Recommend for SBI PO, SBI Clerk, IBPS RRB/PO/Clerk Exams

1. Devi purchased a car for Rs. 25000 and sold it for Rs. 34800. What is the percent profit she made on the car?

a.40%

b.39.2%

c.38.4%

d.38%

e. None of these

2. A loss of 10% is made by selling an article. Had it been sold for Rs 75 more, there would have been a profit of 5%. What would be the selling price of the article if it is sold at 15% profit?

a. Rs 475

b. Rs 520

c. Rs 575

d. Rs 425

e. None of these

3. Ramya purchased a bike for Rs.54000. He sold it at a loss of 8 percent. With that money, he again purchased another bike and sold it at a profit of 10 percent. What is his overall loss/profit?

a. loss of Rs. 657

b. profit of Rs. 567

c. loss of Rs. 648

d. profit of Rs. 648

e. None of these

4. When a article is sold for Rs.3400, there is a loss of 2%. What is the cost price of the commodity?

a. Rs 3500.50

b. Rs 3200

c. Rs 3400.56

d. Rs 3469.34

5. The profit earned after selling an article for Rs. 1516 is the same as loss incurred after selling the article for Rs. 1112. What is the cost price of the article?

a. Rs. 1314

b. Rs. 1343

c. Rs. 1414

d. Rs. 1434

e. None of these

6. The sale price of an article including the sale tax is Rs. 616. The rate of sale tax is 10% . If the shopkeeper has made a profit of 12%, the cost price of the article is [The Pearson Guide book]

a. Rs 500

b. Rs 515

c. Rs 550

d. Rs 600

7. Sika purchased an item for Rs. 9600 and sold it for a loss of 5 percent. From the money, she purchased another item and sold it for a gain of 5 percent. What is her overall gain/loss?

a. loss of Rs. 36

b. profit of Rs. 24

c. loss of Rs. 56

d. profit of Rs. 54

e. None of these

8. A man sold a wristwatch for Rs. 2400 at a loss of 25%. At what rate should he have sold the wristwatch, to earn a profit of 25%.

a. Rs. 3600

b. Rs. 4000

c. Rs. 3500

d. Rs. 3800

e. None of these

9. Kala purchased an item of Rs. 46000 and sold it at loss of 12 percent. With that amount, she purchased another item and sold it at a gain of 12 percent. What was her overall gain/loss?

a. loss of Rs. 662.40

b. profit of Rs. 662.40

c. loss of Rs. 642.80

d. profit of Rs. 642.80

e. None of these

10. Shan bought 30 liters of milk at the rate of Rs.8 per liter. He got it churned after spending Rs.10 and 5kg of cream and 30 liter of toned milk were obtained. If he sold the cream at Rs.30 per kg and toned milk at Rs.4 per liter, his profit in the transaction is?

a.20%

b.8%

c.30%

d.40%

11. Lokesh bought an article for Rs.2500.He spent Rs.320 on its shopping. He then sold it for Rs. 4089. What was the percent profit he gained in this transaction?

a.38%

b.45%

c.46%

d.35%

e. None of these

12. A shopkeeper allows 2% discount and gives 1 article free on purchase of 6 articles. He earns 40% profit during the transaction. By what percent above the cost price he marked his good?

a.50%

b.60%

c. 42 (6/7)%

d. 66 (2/3)%

e. None of these

13. Jaga bought a refrigerator with 20% discount on the labeled price. Had he bought at it with 30% discount, he would have saved Rs. 500 more. At what price did he buy the refrigerator?

a. Rs 5000

b. Rs 10,000

c. Rs 12,500

d. Rs 15,000

14. A trader bought 8 kg of rice at Rs 10 per kg. While selling he uses false weights of 1600 gm instead of 2 kg. What profit did he make by selling 8 kg of rice bought?

a. Rs 18

b. Rs 30

c. Rs 20

d. Rs 26

e. Rs 33

15. Two mobiles are sold at same price. If on one, a profit of 25% is made and on another, a loss of 10% is incurred, find the net profit/loss%?

a. 10 62/99%

b. 15 12/33%

c. 6 14/23%

d. 4 28/43%

e. 15 1/5%

16. A discount of 25% on one article is same as a discount of 50% on another article .The costs of two article can be?

a. Rs 30, Rs 20

b. Rs 90, Rs 40

c. Rs 80, Rs 40

d. Rs 50, Rs 40

17. The difference between the cost price and sale price of an article is Rs. 500 if the profit is 20%. The selling price is?

a. Rs 4000

b. Rs 1500

c. Rs 3000

d. Rs 3300

18. Due to reduction of 20% in price of pens a customer can purchase 5 more pens for Rs. 40. What is the original price of a pen?

a. Rs 5

b. Rs 3

c. Rs 2

d. Rs 6

e. Rs 8

19. The selling price of an article by two different vendors is Rs.960. and profit earned is 25%. One vendor counts his profit on cost price while other one counts his profit on selling price. Find the difference of profit earned by both the vendors?

a. Rs.33

b. Rs.62

c. Rs.44

d. Rs.50

e. Rs.48

20. If the cost price of 15 articles is equal to the selling price of 12 articles, find gain percent?

a.20%

b.25%

c.30%

d.21%

e. None of these

21.An article was purchased for Rs. 78350. Its price was marked up by 30%. It was sold at a discount of 20% on the marked up price. What was the profit percent on the cost price?

a.4%

b.7%

c.5%

d.3%

e.65%

22. A person sold an article at 16 (2/3)% profit on Selling Price. Afterwards when the cost price reduced by 10% then he also reduced the selling price by 10%. His percentage of profit on cost price will be?

a.20%

b.21%

c.19%

d.25%

e.26 %

23. On selling an article for Rs.(x-1800), Esha incurred a loss equal to half of the profit she would have gained on selling the same article for Rs.(x+2700). Find the value of x, if to gain a profit of 27.5% she needs to sell the article for Rs.8925?

a.8500

b. 7715

c. 7300

d. 6685

e. 7000

24. A shopkeeper labeled the price of his articles so as to earn a profit of 30% on the cost price. He then sold the articles by offering a discount of 10% on the labeled price. What is the actual percent profit earned in the deal?

a.18%

b.15%

c.20%

d. cannot be determined

e. None of these

25.The marked price of a sofa is 11,500 . The shopkeeper sold it by allowing 18% discount on the market price and earned 15% profit. What is the cost price of the sofa ?

a. 8000

b. 8100

c. 8200

d. 8400

26. After receiving 25% discount on an item, Anil needs to pay 2.5% CGST and 2.5% SGST on the discounted price . If Anil had got only 20% discount paid the same tax on discounted price then, he would

have to pay Rs.84 extra. Find the original marked price of the item?

a. Rs.1770

b. Rs.1420

c. Rs.1550

d. Rs.1600

e. Rs.1125

27. A man buys a single apple for Rs 25. If he were to buy a dozen apples, he would have to pay a total amount of Rs 250. What is approximate Percent discount he would get on buying a dozen apples?

a.32%

b.20%

c.12%

d.17%

e. None of these

28.A vendor loses the selling price of 4 apples on selling 36 apples. His loss percent is

a. 12(1/2)%

b. 11(1/2)%

c. 10%

d. 9%

29.The cost price of an item is Rs.120 and the profit percentage is (x+30)% of the cost price. If the cost price is increased by 25% and selling price remains same the profit percentage is (x-20)% . Find the value of x.

a. 120

b. 105

c. 90

d. 85

e. 100

30. The ratio of the cost price to the marked price of a watch is 3:5 and ratio of the percentage profit to the percentage discount is 5:3.Find the profit percentage?

a.13.34%

b.16.65%

c.16.43%

d.17.5%

31.A shopkeeper sells his gods at its CP only. But he uses 650 g weight at the place of 1000 g weight for a kg. What is his net profit percentage?

a.55%

b. 20 1/3%

c. 49 2/3%

d. 53 11/13%

e. None of these

32. A person sold a Tube light at Rs.85.25 in such a way that his percentage profit is the same as the cost price of the Tube light. If he sells it at twice the percentage profit of his previous percentage of the profit then the new selling price will be

a. Rs. 110.5

b. Rs.115.05

c. Rs.115.5

d. Rs.110.05

33.A shopkeeper buys 12 books at Rs.200 each. He sells 8 books at 15% profit. He marks up the

remaining books by 25% and then offers a discount of 12%. Find the overall profit percentage?

a.11.11%

b.17.27%

c.15.23%

d.10.15%

e.13.33%

34. On selling 15 balls at Rs 400 there is loss equal to Cost Price of 5 balls. The cost price of a ball is?

a. 20

b. 30

c. 40

d. 50

e. 60

35. A shopkeeper sold an article for Rs.540 and earned a profit of 20%. Had the shopkeeper sold the same article after giving a cash back of Rs.'x' on the selling price he would have still earned a profit of (100/9)% , find the value of x?

a. Rs.30

b. Rs.40

c. Rs.20

d. Rs.60

e. Rs.50

36. The difference in discounts between two successive discounts of 8% each and a single discount of 16% on Rs.2000 is

a. 6.4

b. 4.6

c. 12.8

d. 12.6

37. A shopkeeper sold his article at cost price but he uses false weight and gives 400gm instead of 600gm. find his loss or profit percent?

a.62%

b.40%

c.50%

d.30%

e.55%

38. Sum of CP's of two cows is Rs. 39, 000. Both the cows are sold at a profit of 20% and 40% respectively with their SP's being the same. What is the difference of CP's of both the cows?

a. Rs. 3,000

b. Rs. 2, 000

c. Rs. 1, 500

d. Rs. 2, 500

e. None of these

39. The profit earned after selling an article for Rs. 1754 is the same as loss incurred after selling the article for Rs. 1492. What is the cost price of the article?

a. Rs. 1623

b. Rs. 1523

c. Rs. 1689

d. Rs. 1589

e. None of these

40. A man gets a profit of 28% after allowing discount of 11(1/9)%. Find how much percent the cost price should be increased to make this Mark Price?

a.40%

b.45%

c.44%

d.46%

e.52%

41. A sold an articles at 10% loss on the cost price. He had bought it at a discount of 20% on the labeled price. What would have been the percentage loss had he bought it at the labeled price?

a.34%

b.18%

c.28%

d.16%

e. None of these

42. Naresh purchase a TV set for Rs. 11250 after get discount of 10% on the labelled price. He spent Rs. 150 on transport and Rs. 800 on installation. At what price the TV be sold so that the profit earned have been 15%?

a. Rs. 12937.50

b. Rs. 14030

c. Rs. 13450

d. Rs. 15350

e. None of these

43. If 8kg of tea price costing Rs56/kg is blended with 32kg of tea of Rs69/kg and 25kg of Rs75/kg and the mixture is sold at 20% profit. Find the selling price (in rupees) of mixture?

a. 82.64

b. 83.64

c. 80

d. 85

e. 84.56

44. The profit earned after selling an article for Rs. 878 is the same as loss incurred after selling the article for Rs. 636. What is the cost price of the article?

a. Rs. 797

b. Rs. 787

c. Rs. 767

d. Rs. 757

e. None of these

45. A seller calculated his intended selling price at 6% profit on the cost of a product. However, owing to some mistake while selling, the units and tens digits of the selling price got interchanged. This reduced the profit by Rs. 180 and profit percentage to 2.4%. What is the cost price of the product?

a. Rs. 4500

b. Rs. 5000

c. Rs. 4750

d. Rs. 6000

e. None of these

46.A shopkeeper is giving a discount of 20% on the marked price but a customer bargains and the

shopkeeper sells him at Rs. 240 less than he was supposed to sell. If the profit of the shopkeeper is decreased from 80% to 50% find the marked price of the item.

a. 1300

b. 1600

c. 1100

d. 1500

e. 1800

47.Article X and Y were sold at 10% and 15% discounts resp. Cost price of both articles was same. Find the ratio marked price of the article A and B resp. if profit earned from article A and B was 8% and 40/3% resp.

a. 7:4

b. 3:5

c. 9:10

d. 5:2

e. 9:8

48.Prakash bought a bike at 20% discount on its original price.He sold it with 30% increase on the price he bought it.The new sale price is by what percent more than the original price ?

a.4%

b.5%

c.10%

d.22%

e. None of these

49. Mani bough a printer and sold it to Raj for Rs.2160 thereby making a profit of 20%. At what price Mani must sell the printer to earn a profit of 40%?

a. Rs.2780

b. Rs.2665

c. Rs.2000

d. Rs.2520

e. Rs.2200

50. A vendor sells calculators at the rate of Rs. 250 each and earns a commission of 20% on each. He also sells pens at the rate of Rs. 50 each and earns a commission of 10% on each. How much amount of commission will he earn in three days if he sells 10 calculators and 5 pen a day?

a. Rs. 1575

b. Rs. 1445

c. Rs. 1550

d. Rs. 1450

e. None of these

Answer Key with Solution

Solution (1-50)

1. B

Profit = 34800 – 25000 = 9800

% profit = (9800 * 100)/25000 = 39.2%

2. C

Use shortcut for these type of questions:

CP of article = 75 × 100/ [5 – (-10)] (+5 for 5% profit, -10 for 10% loss)

So SP at 15% profit = 115/100 * CP = (115/100) * [75 × 100/15] = Rs 575

3. D

Loss = (54000 * 8)/100 = Rs. 4320

s.p of bike = 54000 – 4320 = Rs. 49680

Profit = (49680 * 10)/ 100 = Rs. 4968

s.p of bike = 49680 + 4968 = Rs. 54648

Profit = 54648 - 54000 = Rs. 648

4. D

loss=2% so,

98%………….3400

100%………..?

?=(3400×100)/98=3469.34

5. A

Let c.p = Rs x

Profit = Rs y

∴ x + y = s.p

=> 1516 = x + y ….(1)

When S.P = Rs 1112 then loss = Rs y

∴ 1112 = x – y ….(2)

Adding both the eqn.

=> 2x = 2628

=> x = Rs. 1314

6. A

110% of S.P. = 616

= S.P. = Rs.(616 x 100/110) = Rs.560.

C.P. = Rs (100/112 x 560)

= Rs 500

7. E

Loss = (9600 * 5)/100 = 480

s.p = 9600 – 480 = 9120

Again, Profit = (9120 * 5)/100 = 456

∴ s.p = 9120 + 456 = 9576

Overall Loss = 9600 – 9576 = Rs. 24

8. B

Let c.p = x

s.p = 0.75 * x = 2400

=> x = 3200

Again, Profit = (3200 * 25)/100 = Rs. 800

s.p = 3200 + 800 = Rs. 4000

9. A

c.p = 46000

s.p = 12% loss of c.p

=> 12 * 46000/100 = RS. 5520

s.p = 46000 – 5520 = Rs. 40480

Again, Profit = 40480 * 12/100 = Rs. 4857.6

s.p = 40480 + 4857.6 = Rs. 45337.6

Loss = 46000 – 45337.6 = Rs. 662.40

10. B

CP =Rs.(30 x 8 + 10) = Rs.250

SP = Rs. (30 x 5 + 30 x 4) = Rs.270

Gain% = (20/250 x 100)% = 8%

11. B

Total cost price = 2500 + 320 = Rs. 2820

Profit = 4089 – 2820 = Rs. 1269

% profit = (1269 * 100)/2820 = 45 %

12. D

Discount=2%=1/50 MP:SP=50:49

Profit=40%=2/5=> CP:SP=5:7

MP:SP:CP=50:49:35

This 35 is the CP of (6+1) hence the CP for 6 will be 30

(50-30)/30*100= 66 (2/3)%

13. A

Let the labelled price be Rs.x Then,

(80% of x)- (70% of x) = 500

10% of x =500

10%………..500

100%…………? ?= (500 x 100/10) = 5000=x

14. C

He uses 1600 grams weight instead of 2 kg, means he makes a profit here.

That profit% = (2000-1600)/1600 * 100 = 25%

1 kg or 1000 gm costed him Rs 10. So 1600 gms costs his Rs 16.

Now on selling each 1600 gms he makes 25% profit. So profit = 25/100 * 16 = Rs 4

On selling each 1600 gms, he makes a profit of Rs 4, so on selling 5 * 1600 = 8000 gms or 8 kg, he makes a profit of 5 * 4 = Rs 20

15. D

profit 25% = 125, loss 10% = 90. Let SP of each mobile = LCM of (125 and 90) = 2250

So CP1 = 100/125 * 2250 = Rs 1800, and CP2 = 100/90 * 2250 = Rs 2500

So total SP = 2250+2250 = Rs 4500

Total CP = 1800+2500 = Rs 4300

So gain% = (4500-4300)/4300 * 100 = 200/43%=4 28/43%

OR use formula:

gain/loss% = [100(25 – 10) – 2 (25)(10)] / [(100+25) + (100-90)] = (1500-500)/215 = + 200/43%

16. C

Let the costs of the two articles be x and y. Then,

25% of x = 50% of y

=> x/y = 50/25 = 2/1

So,x and y must be in the ratio of 2:1→80 and 40

17. C

120%-100%=20%

20%…………………500

120%……………?

?=3000

18. C

There is 20% reduction in price. So to keep the total amount same, consumption should increase by 20/(100-20) * 100 = 25%

For 25% (25/100 = 1/4) increase in consumption, customer can purchase 5 more pens

So original price of pens = 4*5 = Rs 20

So original price of 1 pen = 40/20 = Rs 2

19. E

CP of item for first vendor = 960/(100+25)% = Rs.768

CP of item for second vendor = 960*(100-25)% = Rs.720

Profit for first vendor = 960 – 768 = Rs.192

Profit for second vendor = 960 – 720 = Rs.240

Required Difference = 240 – 192 = Rs.48

20. B

Let c.p of 1 article = x

s.p of 12 articles = c.p of 15 articles = 15x

∴ s.p of 15 articles = 15 * 15x/12 = 75x/4

Profit = 75x/4 - 15x = 15x/4

%profit = (15x/4 * 100)/15x = 100/4 = 25%

21. A

c.p = 78350

Marked up price = 78350 * 30/100 = 23505

s.p = 78350 + 23505 = 101855

=> Discount = 101855 * 20/100 = 20371

s.p = 101855 – 20371 = 81484

Profit = 81484 – 78350 = 3134

%profit = (3134 * 100)/78350 = 4%

22. A

Profit on SP= 1/6

SP:CP=6:5 multiply by 10 for easy calculation= 60:50

60-6 : 50-5=54:45

=(54-45)/45*100=20%

23. C

CP of the article = 8925/1.275 = Rs.7000

Loss incurred = 7000 – (x-1800) = Rs.(8800 – x)

Profit gained = (x+2700) – 7000 = Rs.(x-4300)

(8800-x) = (x-4300)/2

17600-2x=x-4300

3x=21900

X=7300

24. E

Let c.p = 100

Labeled price = (100 * 130)/100 = 130

Discount = (130 * 10)/100 = 13

so , s.p = 130 – 13 = 117

∴ Profit = 117 – 100 = 17

%profit = 17 * 100/100 = 17%

25. C

11500×(82/100)×(100/115) = 8200

26. D

Total tax = 2.5+2.5 = 5%

Let the original marked price be x. (x*4/5*1.05) – (x*3/4*1.05) = 84

=> x*1.05(4/5-3/4) = 84

=> x = Rs.1600

27. D

c.p of an apple = 25

c.p for 12 apple = 12 * 25 = 300

Discount = 300 – 250 = 50

% Discount = 50 *100/300 = 16.66 = 17%

28. C

Selling price of 36 apples = Rs.36

Selling price of 4 oranges = Rs.4

Loss = 4

Cost price = 36+4 = 40

Loss % = (4/40)×100 = 10%

29. A

Profit on item = (x+30)% of 120

SP = (x+30)% of 120+120

New CP = (100+25)% of 120 = Rs.150

SP = 150 + (x-20)% of 150 (x+30)% * 120 + 120 = 150 + (x-20)% of 150

=> 12x + 360 – 15x + 300 = 300

=> x = 120

30. B

Cp:mp = 3x:5x = 300 : 500

Profit = 2x

P:d = 5:3

(5x×300)/100 +(3x×500)/100 = 100

30x = 100

X =(100/30) = 3.33%=> 5x = 16.65%

31. D

His profit % = $\frac{350}{650} \times 100 = 53\frac{11}{13}\%$

32. C

Cp = x

Sp = x+(x2/100) = 85.25

x2+100x-8525 = 0

(x+155)(x-55) = 0

X = 55

Now sp = 55+(55×110)/100 = 55+60.50 =115.5

33. E

CP of 12 books = 200*12 = Rs. 2400

SP of 8 books = 8*1.15*200 = Rs.1840

MP of each remaining book = 200*1.25 = Rs.250

SP of each remaining book = 250*0.88 = Rs.220

SP of each remaining 4 books = 220*4 = Rs.880

Total SP of 12 books = 1840+880 = Rs.2720

Profit% = (2720 – 2400)*100/2400 = 13.33%

34. C

loss= CP-SP

CP of 5=CP of 15- SP of 15

CP of 10=SP of 15=400

CP of 1 =40

35. B

CP of the article = 540/1.2 = Rs.450

Let cash back be x. (100+100/9)% of 450 = 540 – x

=> x = Rs.40

36. C

Two successive discounts of 8% = [8+8-(8*8/100)]% = 15.36%

Diff = 16 – 15.36 = 0.64%

Required diff = 2000×(0.64/100) = Rs. 12.8

37. C

(600-400)/400 *100 = 200/400 * 100=50%

38. A

First cow : Second cow

Let CP → $10_{\times 7}$: $10_{\times 6}$

SP → $12_{\times 7}$: $14_{\times 6}$

Ratio of their cost price = 7 : 6

∴ 130 → 39000

1 → 300

10 → 3000 Rs.

39. A

Let c.p = x and profit = y

s.p = x + y

=> 1754 = x + y....(1)

Again, when loss is y

=> 1492 = x – y....(2)

Adding both equations; 2x = 3246

=> x = 1623

40. C

Gain – 28%   CP………SP

.   100………128

Discount 11(1/9)% = 1/9

MP………..SP

9…………….8

Make SP same

CP…………SP…………….MP

100……….128……………144

MP – CP =44%

41. C

Let labelled price = 100

Discount = 100 * 20 /100 = 20

c.p = 100 – 20 = 80

Loss = 80 * 10/100 = 8

s.p = 80 – 8 = 72

Loss = 100 – 72 = 28

% Loss = 28 * 100/100 = 28%

42. B

c.p = 11250

Extra money spent = 150 + 800 = 950

Total c.p = 11250 + 950 = 12200

Profit (15%) = 12200 * 15/100 = 1830

s.p = 12200 + 1830 = 14030

43. B

(8*56 + 32*69 + 25*75)/ 65 = 69.70

(69.70/100) * 120 = 83.64

44. D

Let c.p = x and profit = y

s.p = x + y

=> 878 = x + y....(1)

=> 636 = x – y....(2)

=> 2x = 1514

=> x = 757

45. B

Profit % reduced = 6 - 2. 4 = 3.6%

∴ Required CP = $\frac{180}{3.6} \times 100$

= 5000 Rs.

46. E

Let the MP be x.

And CP be y. 1.8y = 0.8x —-(1)

And 1.5y = 0.8x – 240 —-(2)

Now, 1.8y = 1.5y + 240

=> y = Rs.800

So, x = (1.8*800)/0.8 = 1800

47. C

Let the CP of both the article be Rs.x.

SP of X = 108% of x = Rs.108x

SP of Y = 340/3% of x = Rs.17x/15

MP of X = 1.08x/0.9 = Rs.1.2x

MP of Y = 17x/15/0.85 = Rs.4x/3

Required ratio = 1.2x:4x/3 = 9:10

48. A

Let original price = Rs.100

20% discount = Rs.20

CP = 80

SP = (130/100)×80 = 104

Percentage = (104 – 100)% = 4%

49. D

CP be x. x*1.2 = 2160

=> x = 1800

Required Amount = 1800*1.4 = Rs.2520

50. A

Profit on calculator = (250 * 20)/100 = Rs. 50

For 10 calculators = 50 * 10 = Rs. 500

Profit on pen = (50 * 10)/100 = 5

For 5 pens = 5 * 5 = Rs. 25

Total profit = 500 + 25 = Rs. 525

Total profit for 3 days = 525 * 3 = Rs. 1575