**Name : Ankita Balasaheb Dhumal**

Percentage profit and loss

1) The length and the breadth of the rectangle are increase by 15% and 20% respectively. What is the percentage increase in the area of rectangle?

1. 38%
2. 42%
3. 46%
4. 50%

**Ans : x + y +(x \* y) /100**

**15 + 20 + 15 \* 20 /100**

**a) 38%**

2) The length and the breadth of rectangle are increase by 12% and x% respectively, thereby area of rectangle increase by 40%.

What is the value of x?

1. 25
2. 28
3. 31
4. 34

**Ans : 40 = 12 + x + (12\*x)/100**

**40 = 12 + x + 0.12x**

**40 – 12 = x+0.12x = 1.12x**

**28 = 1.12x**

**X = 28/1.12 = a) 25%**

1. A sugar trader declares that he sells sugar at the cost price. However, he uses a weight of 450g instead of 500g. His percentage

profit is:

* 1. 10%
  2. 11%
  3. 12%
  4. 12%

**Ans : profit = 500 – 450 = 50**

**Profit % = (50 /450) \* 100=11.11%**

**B)** 11%

1. The difference between CP and SP of a table fan is Rs 175 where it gives the profit of 14%. What is SP of that fan (in Rs.)?
2. 1225
3. 1450
4. 1425
5. 1275

**Ans : SP = X +114% of X = X(1 + 14/100) = 1.14x**

**1.14 – x = 175**

**0.14X =175**

**X= 175/0.14 = 1250**

**SP = CP +175 = 1250 + 175 = 1425**

**c) 1425**

5) The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

1. 15
2. 16
3. 18
4. 25

**Ans : SP = 25**

**X = 25/1 = 25**

**d)25**

6) Marked price of the article is Rs.100. It sold with first discount of 10% and second discount was half of the previous discount then find the selling price after the two successive discounts.

1. Rs.87.5
2. Rs.90
3. Rs.85.5
4. Rs.85

**Ans : 100 \* (1-10/100) \* (1-5/100)**

**100 \* 0.90\* 0.95 = 85.5**

**c)85.5**

7) An article was sold at a profit of 20%. If both the cost price and selling price decreases by Rs.3000, then the profit would be 25%. Find the original cost price.

a) Rs. 15000

1. Rs. 30000
2. Rs. 45000
3. Rs. 60000

**Ans : SP = x + 20% of x = 1.2x**

**SP = x – 3000 + Profit25% = 1.25(x-3000)**

**1.25 – 1.2x = 3750 – 300 =750**

**0.05x = 750 = x = 750/0.05 = 15000**

**a)15000**

8) The loss incurred by selling 16m of a cloth equals the selling price of 4m of that cloth. Find the loss percentage.

1. 15%
2. 20%
3. 33.33%
4. 25%

**Ans : b) 20%**

9) A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%? a) 3

1. 4
2. 5
3. 6

**Ans : SP = 1/6 + 20% of 1/6 =(1/6) \* 1.2 = 0.20**

**1/0.20 = 5**

**c)5**

10) A trader mixes 25% kerosene to his petrol and then he sells the whole mixture at the price of petrol. If the cost price of kerosene be 50% of the cost price of petrol, what is the net profit percent?

1. 11%
2. 12%
3. 9%
4. 20%

**Ans : b)12%**

11) A shopkeeper sells his goods at the same price as what he pays his supplier. But when he buys from his supplier, he takes 10% more than the indicated weight and when he sells to his customers he gives 10% less than the indicated weight. Find his profit percentage.

1. 18%
2. 22%
3. 20%
4. 20%

**Ans : let quantity = 100g**

**Cp per g = 100/90**

**Profit % = [SP – CP] \* 100**

**100/90 – 100/110) / (100/110) \* 100 : (11.11- 909)/9.09 \* 100 = 22%**