# ADP Aptitude

1. **The profit earned after selling an article for Rs. 1680 is the same as the loss incurred after selling the article for Rs. 1512. What is the cost price of the article?**

A. Rs.1200
B. Rs.1596
C. Rs.1602
D. Rs.1912

**Answer –** B. Rs.1596
**Explanation:**
Let us assume Cost Price = x
Then, according to the given data
1680 – x = x – 1512
2x = 3192
x = 1596.

2. **By selling an article for Rs 600 more, Santosh would have made a 5% profit on his sale instead of an 11% loss. What was its cost price?**

A. Rs. 2250
B. Rs. 3750
C. Rs. 4000
D. Rs. 6000

**Answer -** B. Rs. 3750
**Explanation:**
Cost Price = (Difference in SP) / (% Difference in profit)
= 600/(5-(-11)) × 100
= (600/16)×100
= 3750
Therefore, the cost price of Santosh is Rs. 3750.

3. **A shopkeeper sold a smartphone for Rs.15000. Had he offered a discount of 10% on the Selling Price, he would have earned a profit of 8%. What is the Cost Price of that Smartphone?**

A. 11300
B. 11500
C. 12300
D. 12500

**Answer –** D. 12500
**Explanation:**
Given that
Selling Price of Smart Phone = Rs.15000
Discount = 10%
New SP = 15000 – 1500 = Rs. 13500
Profit = 8%
Hence, the actual Cost Price of a Smart Phone = 13500 * 100/108 = 12500

4. **M does half as much work as N in three-fourths of the time. If together they take 36 days to complete the work, then the time taken by N alone to do the work.**

A. 50 days
B. 55 days
C. 60 days
D. 65 days

**Answer –** C. 60 days
**Explanation:**
Let us assume N takes to complete a job = x days
Given that, M does half as much work as N in three-fourth of the time
So, to do the same work M will take 2*(3x/4) = 3x/2 days.
1/x + 2/3x = 1/36
x= 60
Therefore, the time is taken by N alone to do the work in 60 days.

5. **Poojith is twice as fast as Suresh and therefore Poojith is able to finish the work in 30 days less than Suresh. Find the time in which they can complete the work when both are working together?**

A. 20 days
B. 25 days
C. 30 days
D. 35 days

**Answer –** A. 20 days
**Explanation:**
Let us assume Suresh take x days to complete the work.
Then, Poojith will take x/2 days to complete the work.
Now, x– x/2 = 30
Hence, x = 60

1/60 + 1/30 = 1/d
Therefore, we will get d= 20 days

6. **A certain number of men take 45 days to complete work. If there are 10 men less then they will take 60 days to complete the work. Find the original number of men.**

A. 30
B. 40
C. 50
D. 60

**Answer –** B. 40
**Explanation:**
Let initially there are x men. Then x*45 = (x-10)*60.
Hence, x = 40
Therefore, the original number of men is 40.

7. **X and Y were assigned to do work for an amount of 1200. X alone can do it in 15 days while Y can do it in 12 days. With the help of Z, they finish the work in 6 days. Find the share if Z.**

A. 100
B. 120
C. 140
D. 160

**Answer –** B. 120
**Explanation:**
1/15 + 1/12 + 1/Z = 1/6,
we got Z = 60
So the ratio of work done by P: Q: R = 4: 5: 1
Therefore, Z share = (1/10)*1200 = 120

8. **Out of the total investment, P invested 1/4th, Q invested 1/3rd of the remaining and R the remaining. Q earned Rs 10,000 after a year. Find the yearly profit of all.**

A. Rs. 40,000
B. Rs. 45,000
C. Rs. 49,600
D. Rs. 58,500

**Answer -** A. Rs. 40,000
**Explanation:**
Let total investment = Rs. x
Then P's = (1/4)*x
Remaining = 3/4th of x
So Q's investment = (1/3)*(3x/4) = x/4
And R's = x – (x/4 + x/4) = x/2
so ratio of profits = x/4 : x/4 : x/2 = 1 : 1 : 2
so 1/4 * x = 10,000
x = 40,000
Therefore, the yearly profit of all is Rs. 40,000

9. **In a Company the average income of all the employees is Rs. 20000 per month. Recently the company announced increment of Rs. 2000 per month for all the employees. The new average income of all the employees is?**

A. Rs. 22000
B. Rs. 24000
C. Rs. 28000
D. Rs. 26000

**Answer –** A. Rs. 22000
**Explanation:**
Given that, Average income of all employees = 20000
As well as, Average also increased by 2000
Therefore, the New Average income of all employees = 22000.

10. **The average expenditure of Praveen for January to June is Rs. 4200 and he spent Rs. 1200 in January and Rs.1500 in July. The average expenditure for the months of February to July is?**

A. 2750
B. 3250
C. 4250
D. 4500

**Answer –** C. 4250
**Explanation:**
Given that the average expenditure for January to June is Rs. 4200
Total Expenditure(Jan – June) = 4200 * 6 = 25200
Total Expenditure(Feb – June) = 25200 – 1200 = 24000

Therefore, Total Expenditure(Feb – July) = 24000 + 1500 = 25500/6 = 4250

11. **The arithmetic mean of the scores of a group of students in a test was 52. The brightest 20% of them secured a mean score of 80 and the dullest 25% a mean score of 31. The mean score of the remaining 55% is?**

A. 51.4
B. 52.6
C. 56.1
D. 55.3

**Answer –** A. 51.4
**Explanation:**
Let the required mean score be "a"
Then, 20 x 80 + 25 x 31 + 55 x a = 52 x 100
1600 + 775 + 55a = 5200
55a = 2825
a = 51.4

12. **The average weight of 8 persons increases by 2.5 kg when a new person comes in place of one them weighing 65 kg. What might be the weight of the new person?**

A. 65 kg
B. 70 kg
C. 85 kg
D. 92 kg

**Answer –** C. 85 kg
**Explanation:**
According to the given information
Total weight increased = (8 x 2.5) kg = 20 kg
Therefore, Weight of new person = (65 + 20) kg = 85 kg

13. **Nikil can row upstream at 8 kmph and downstream at 12 kmph. What is the speed of the stream?**

A. 2 kmph
B. 3 kmph
C. 4 kmph
D. 6 kmph

**Answer -** A. 2 kmph
**Explanation:**
Given that
Speed downstream a = 12kmph
Speed upstream b = 8 kmph
Speed of the stream = 1/2(a-b) = 1/2(12-8)
= 4/2 = 2 kmph
Therefore, Speed of the stream = 2 kmph

14. **80% of a small number is 4 less than 40% of a larger number. The larger number is 125 greater than the smaller one. The sum of these two numbers is?**

A. 325
B. 335
C. 345
D. 355

**Answer -** D. 355
**Explanation:**
Let us assume
smaller number = p; larger number = q
0.8p + 4 = 0.4q
4q – 8p = 40
q – p = 125
p = 115; q = 240
Therefore, the sum of the two numbers, p + q = 355

15. **The diameter of Road Roller is 84 cm and its length is 150 cm. It takes 600 revolutions to level once on a particular road. Then what is the area of that road in square meters?**

A. 2376
B. 2476
C. 2496
D. 2516

**Answer –** A. 2376
**Explanation:**
Given that the diameter of the road roller is 84 cm.
and its length = 150 cm
Now, Area = 600*2*22/7*42/100*150/100=2376