

Telegram - <https://t.me/freecoursebySWF>

Goldman Sachs Aptitude Questions & Solutions

Question 1:- If 5 students utilize 18 pencils in 9 days, how long at the same rate will 66 pencils last for 15 students?

1. 10 days
2. 12 days
3. 11 days
4. None of these

Answer & Explanation

Answer: Option 3

Required number of days = $9 \times \frac{5}{15} \times \frac{66}{18} = 11$ days

Question 2:- A man rows 8 km/hr in still water. If the river is running at 2 km/hr, it takes 32 minutes to row to a place and back. How far is the place?

1. 1.5 km
2. 2.5 km
3. 2 km
4. 3 km

Answer & Explanation

Answer: Option 3

Upstream speed = $8 - 2 = 6$ km/h,

Downstream speed = $8 + 2 = 10$ km/h

$$D/10 + D/6 = 32/60$$

, solving we get $D = 2$ km.

OR simply checking by the options

Question 3:- A person on tour has Rs. 360 for his daily expenses. He decides to extend his tour programme by 4 days which leads to cutting down daily expenses by Rs. 3 a day. The number of days of his tour programme is

1. 15

2. 20

3. 18

4. 16

Answer & Explanation

Answer: Option 1

On checking the options we find that if the tour is for 20 days then the daily expenses will be Rs 18. To extend the tour by 4 days would make the tour for 24 days and the daily expense will become Rs 15, so the total bill will be $Rs\ 24 \times 15 = Rs\ 360$, the same as before.

Question 4:- The tax on a commodity is diminished by 10 % and its consumption increased by 10 %. The effect on the revenue derived from it changes by K %. Find the value of K.

1. 1

2. 2

3. -1

4. -2

Answer & Explanation

Answer: Option 3

Directly using the formula, when a value is increased by R% and then decreased by R%, then net there is $R^2/100\%$ decrease.

Putting $R = 10$, we get 1 % decrease.

Question 5:- Out of 80 students in a class, 25 are studying commerce, 15

mathematics and 13 physics. 3 are studying commerce and mathematics, 4 are studying mathematics and physics and 2 are studying commerce and physics. 1 student is studying all the three subjects together. How many students are not studying any of the three subjects?

1. 35

2. 40

3. 20

4. 15

Answer & Explanation

Answer: Option 1

$$n(\text{CMP}) = n(\text{C}) + n(\text{M}) + n(\text{P})$$

$$- n(\text{CM}) - n(\text{MP}) - n(\text{CP}) + n(\text{CMP})$$

$$= 25 + 15 + 13 - 3 - 4 - 2 + 1 = 45 \text{ students.}$$

So the number of students not studying any subject = $80 - 45 = 35$.

Question 6:- A portion of a 30 m long tree is broken by a tornado and the top strikes the ground making an angle of 30° with the ground level. The height of the point where the tree is broken is equal to

1. $30/\sqrt{3}$ m

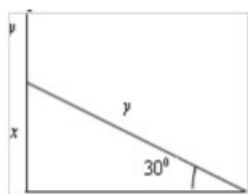
2. 10 m

3. $30\sqrt{3}$ m

4. 60 m

Answer & Explanation

Answer: Option 2



The height of the tree = 30m.

$$\text{So, } x + y = 30\text{m}$$

$$\text{Also } \sin 30^\circ = \frac{1}{2} = \frac{x}{y} \Rightarrow x = \frac{y}{2}$$

$$\text{So } 3x = 30,$$

$$x = 10 \text{ m.}$$

Question 7:- Anil is at present one-fourth the age of his father. After 16 years he will be one-half of the age of his father. Find the present age of Anil's father.

1. 40 years
2. 36 years
3. 32 years
4. 28 years

Answer & Explanation

Answer: Option 3

Let the present ages of Anil and his father be A and F respectively.

Given $A = \frac{1}{4} F$ Also $A+16 = \frac{1}{2} (F+16)$,

Solving we get $F = 32$ years.

OR checking by options.

If Anil's father's present age is 32, then Anil's age is one fourth i.e. 8.

After 16 years, Anil would be 24 years and father will be 48 years old, so Anil's age is half of his father.

Question 8:- A man sitting in a train travelling at the rate of 50 km/hr observes that it takes 9 sec for a goods train travelling in the opposite direction to pass him. If the goods train is 187.5 m long, find its speed.

1. 25 km/hr
3. 40 km/hr
4. 35 km/hr
5. 36 km/hr

Answer & Explanation

Answer: Option 1

Let required speed be x.

$$187.5/(x+50) \times 18 = 9$$

$$x = 25 \text{ km/hr}$$

Question 9:- A sum was put at simple interest at a certain rate for 3 years. Had it been put at 1% higher rate, it would have fetched Rs. 5,100 more. The sum is

1. Rs. 1,70,000
2. Rs. 1,50,000
3. Rs. 1,25,000
4. Rs. 1,20,000

Answer & Explanation

Answer: Option 1

Let the principal = p.

Time = 3 years.

So 1% of p for 3 years = Rs 5100.

p = Rs 170,000.

Question 10:- Fill pipe A is 3 times faster than second Fill pipe B and takes 32 minutes less than Fill pipe B. When will the cistern be full if both pipes are opened together?

1. 25 minutes
2. 24 minutes
3. 30 minutes
4. 12 minutes

Answer & Explanation

Answer: Option 4

Let the time taken by A to fill the pipe is = A min.

So the time taken by B to fill the pipe B is = B min.

According to the given condition $B = 3A$;

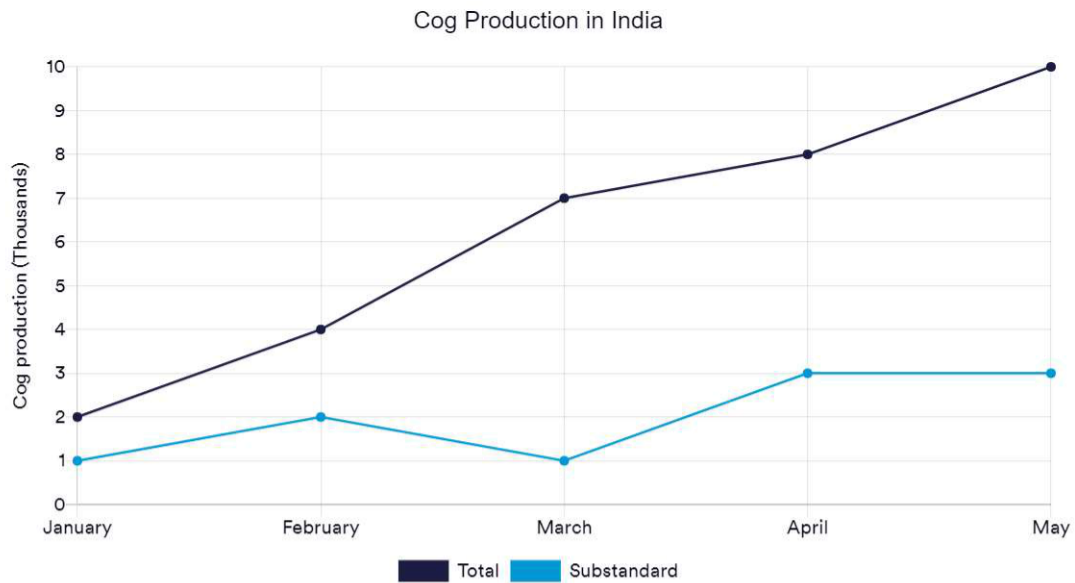
and given that $B - A = 32$ min.

So solving we get $A = 16$ min, $B = 48$ min.

Let the total work be 48 units.

So time taken by them together is $48/4 = 12$ min.

Question 11:-



What percentage of cogs produced in March and May were Substandard?

1. 14.3%

2. 23.5%

3. 30.3%

4. 33.3%

Answer & Explanation

Answer: Option 2

March substandard = 1,000

May substandard = 3,000

Total = 4,000

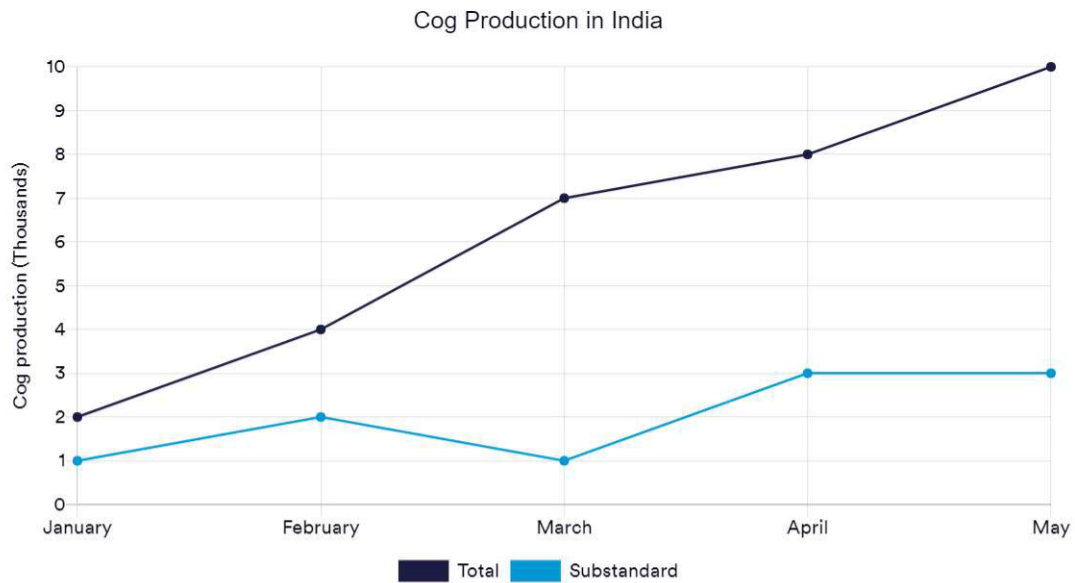
Total March = 7,000

Total May = 10,000

Overall Total = 17,000

$4,000 / 17,000 * 100 = 23.5\%$

Question 12:-



What was the percentage increase in total cog production from February to April ?

- 1. 25%
- 2. 50%
- 3. 75%
- 4. 100%

Answer & Explanation

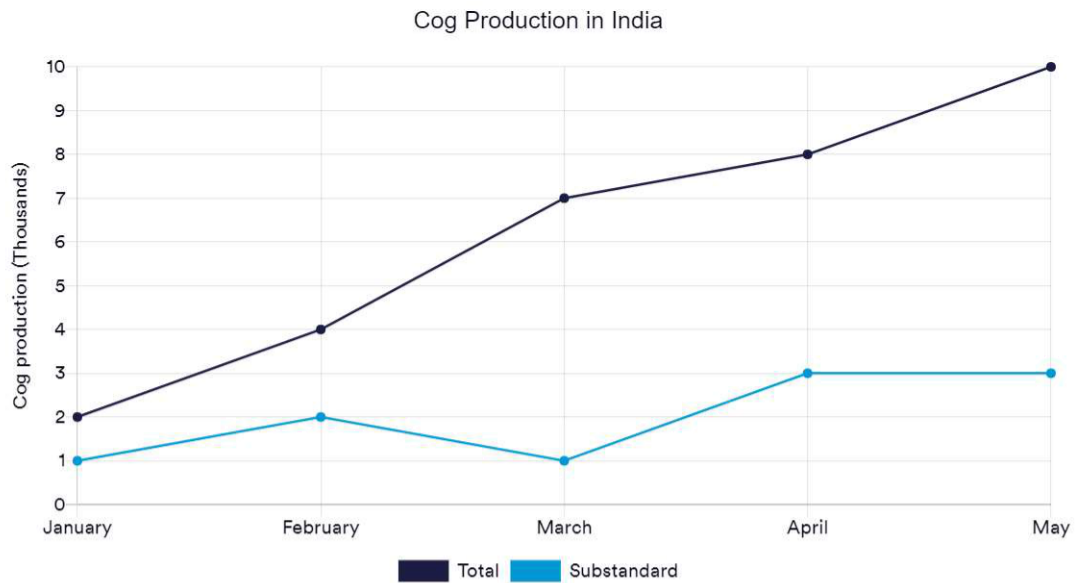
Answer: option 4

April cog production = 8,000

Feb cog production = 4,000

$8,000 - 4,000 / 4,000 * 100 = 100\%$

Question 13:-



How many of the cogs produced in march and April were not substandard ?

1. 5,000

2. 6,000

3. 11,000

4. 15,000

Answer & Explanation

Answer: option 3

March total = 7,000 cogs

March substandard = 1,000 cogs

$7,000 - 1,000 = 6,000$

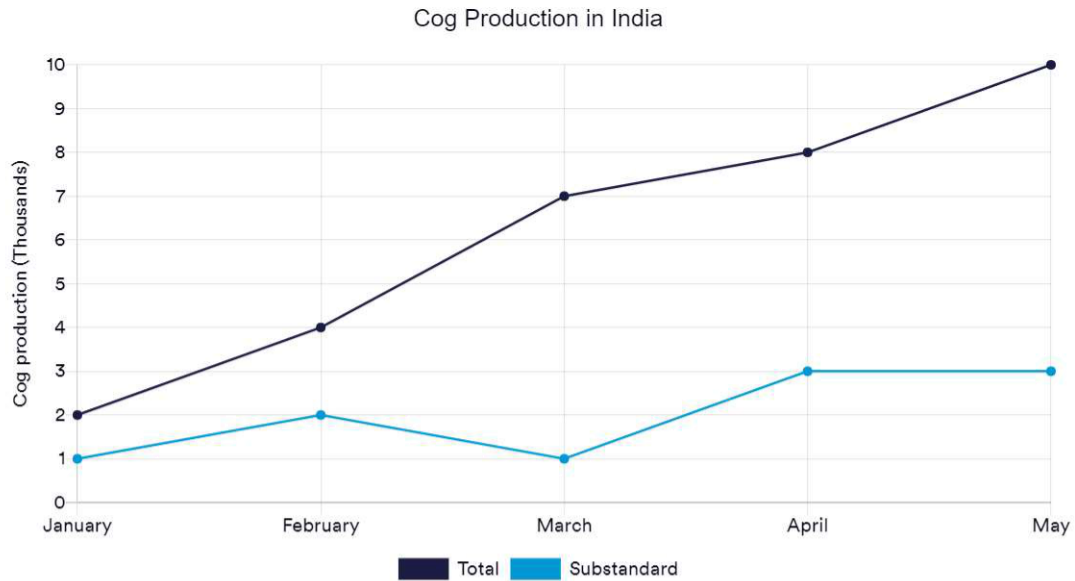
April total = 8,000 cogs

April substandard = 3,000 cogs

$8,000 - 3,000 = 5,000$ cogs

$6,000 + 5,000 = 11,000$

Question 14:-



A substandard cog can only be sold for 20% of the sale price of a standard cog. How much income was generated from total cog sales in May if a standard cog sold then for \$1.99 and assuming all cogs produced in May were sold?

1. \$1,194
2. \$13,930
3. \$15,130
4. \$19,900

Answer & Explanation

Answer: option 3

Step 1 - Calculate value of standard cogs sold:

Number of standard cogs = total - substandard:

$10,000 - 3,000 = 7,000$ Standard cogs

Each cog worth \$1.99, so total = $7,000 \times \$1.99 = \$13,930$

Step 2 - Calculate value of substandard cogs sold

Number of substandard cogs = 3,000

Value of each = 20% of standard value: $0.2 \times \$1.99 = \$0.398 = \$0.40$ to nearest cent

Total: $\$0.4 \times 3,000 = \$1,200$

Step 3 - Total

$13,930 + 1,200 = \$15,130$