

## Average Questions for SSC Exams - Average Quiz at Smartkeeda.

## Average Quiz 1

Directions: Kindly study the following Questions carefully and choose the right answer:

1. Vibhor obtained 66, 74, 55, 92, 79 (out of 100) in English, Maths, Physics, Chemistry and Biology. What's his average marks?
A. $75 \%$
B. $69 \%$
C. $73.2 \%$
D. $76 \%$
2. In Ashish's opinion, his weight is greater than 55 kg but less than 62 kg . His father does not agree with Ashish and he thinks that Ashish's weight is greater than 50 kg but less than 60 kg . His sister's view is that his weight can't be greater than 58 kg . If all of them are correct in their estimation, what is the average of different probable weights of Ashish ?
A. 56.5 kg
B. 68 kg
C. 69 kg
D. Data inadequate
3. The average of 15 numbers is zero. Of them, at the most, how many may be greater than zero?
A. 0
B. 1
C. 10
D. 14
4. Find the average of all the numbers between 8 and 55 which are divisible by 7 .
A. 17
B. 31.5
C. 34
D. 44
5. The average of first five multiples of 5 is:
A. 10
B. 12
C. 15
D. 25
6. The average of first seven prime numbers is:
A. 8
B. 9
C. $\frac{58}{7}$
D. $\frac{59}{7}$
7. A scholar was asked to find the arithmetic mean of the numbers $4,11,7,9,16,13,8$, $19,18,21,12$ and $x$. He found the mean to be 12 . What should be the number in place of $x$ ?
A. 3
B. 17
C. 31
D. 6
8. The average of $3,8,9$ and $x$ is 6 and the average of $17,2,5, x$ and $y$ is 8 . What is the value of $y$ ?
A. 5
B. 12
C. 20
D. 30
9. The average of the first 71 natural numbers is :
A. 34.35
B. 35
C. 32
D. 36
10. The mean of $13,23,33,43,53$ is:
A. 30
B. 35
C. 45
D. 70

## Correct Answers:

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | A | D | B | C | C | D | B | D | C |

## Explanations:

1. So, let's make equation from the given information :

Average $=\left(\frac{66+74+55+92+79}{5}\right)=\frac{366}{5}$

Average $=73.2 \%$.

Hence, option C is correct.
2. Let Ashish weight $X$ kg.

According to Ashish, $55<X<62$

According to Ashish's father, $50<\mathrm{X}<60$

According to Ashish's sister, X < 58
The values satisfying all the above conditions are 56 \& 57 .
Therefore, Required average $=\left(\frac{56+57}{2}\right)=\left(\frac{113}{2}\right)$
So, the Ashish's weight is 56.5 kg .

Hence, option A is correct.
3. Average of 15 numbers $=0$.

Sum of 15 numbers $=(0 \times 15)=0$.

It is quite possible that 14 of these numbers may be positive and if their sum is a, then 15 th number is (-a).

Hence, option A is correct.
4. Multiples of 7 between 8 and 55 will be;
$14,21,28,35,42,49$
Average $=\left(\frac{\text { First term }+ \text { Last term }}{2}\right)=\frac{14+49}{2}$
$\Rightarrow 31.5$.

Hence, option B is correct.
5. Multiple of 5 are: $5,10,15,20,25$. so,

Average $=\frac{\text { First term }+ \text { Last term }}{2}=\frac{(5+25)}{2}=15$.
Hence, option C is correct.
6. Prime number: A counting number, except 1, is called a prime number if it has exactly two factors, namely itself and 1 . So, the first seven prime numbers are given below:
$2,3,5,7,11,13,17$. then,
Average $=\left(\frac{2+3+5+7+11+13+17}{7}\right)=\frac{58}{7}$
Hence, option C is correct.
7. Clearly, we have
$\left(\frac{4+11+7+9+16+13+8+19+18+21+12+x}{12}\right)=12$
or $138+x=144$ or $x=144-138=6$.
Hence, option D is correct.
8.

We have : $\left(\frac{3+8+9+x}{4}\right)=6$, or $20+x=24$, or $x=4$
Also, $\left(\frac{17+2+5+x+y}{5}\right)=8$, or $24+4+y=40$, or $y=12$
Hence, option B is correct.
9. Natural Numbers: Counting numbers are called natural numbers. So, first 71 natural numbers are given below:
$1,2,3,4,5, \ldots . . . . .71$. then,
Sum of first n natural numbers $=\frac{\mathrm{n}(\mathrm{n}+1)}{2}$

So, average of first n natural numbers $=\frac{\mathrm{n}(\mathrm{n}+1)}{2 \mathrm{n}}=\frac{\mathrm{n}+1}{2}$

Required average $=\frac{(71+1)}{2}=\frac{72}{2}$
$=36$.

Hence, option D is correct.
10. To solve this question, we can apply a short trick approach

$$
1^{3}+2^{3}+3^{3}+\ldots \ldots . . n^{3}=\frac{n^{2}(n+1)^{2}}{4}
$$

By the short trick approach, we get

$$
\begin{aligned}
& \frac{1^{3}+2^{3}+3^{3}+\ldots \ldots+5^{3}}{4}=\frac{5^{2}(5+1)^{2}}{4}=\frac{5^{2} \times 6^{2}}{4} \\
& \Rightarrow\left(\frac{25 \times 36}{4}\right)=(25 \times 9) \Rightarrow 225 .
\end{aligned}
$$

So, Required average $=\left(\frac{225}{5}\right)=45$.

Hence, option C is correct.

## -' Smarkeeda <br> The Question Bank

Presents

## TestZone

India's least priced Test Series platform


## ALL BANK EXAMS

2020-2021 Test Series
@ Just
₹ 599/-
300+ Full Length Tests

```
\(\square\) Brilliant Test Analysis
\(\boxed{\checkmark}\) Excellent Content
\(\checkmark\) Unmatched Explanations
```

