

## Average

### Type I – Basic Questions

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%

### Type II- Consecutive no's/Multiples

1) 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

2) The average of first five multiples of 5 is:

- A) 10    B) 12    C) 15    D) 25

3) Average of five consecutive odd numbers is 35. Find the greatest number in these five numbers?

- A) 31    B) 33    C) 39    D) 37

4) Find the average of first 30 multiples of 8

- A) 104    B) 124    C) 130    D) 121

5) The average of 34 numbers is zero. Of them, at the most how many may be greater than zero?

- A) 34    B) 35    C) 32    D) 33

6) The average of a non-zero number and its square is 7 times the number. The number is:

- A) 13    B) 17    C) 29    D) 28

7) The average of seven consecutive even numbers is 36. What is the difference between the highest and lowest numbers ?

- A) 2    B) 5    C) 12    D) Can't be determined

8) The mean of  $1^3, 2^3, 3^3, 4^3, 5^3$  is :

- A) 30    B) 35    C) 45    D) 70

9) Sum of First 100 odd no's is

- A) 10000    B) 10500    C) 10050    D) 11000

### Type III -Questions on Weighted Average

1) The average of the marks obtained in an examination by 8 students was 51 and by 9 other students was 68. The average marks of all 17 students was :

- a) 59    b) 59.5    c) 60    d) 60.5

2) If the average marks of three batches of 55, 60 and 45 students respectively is 50, 55 and 60, then the average marks of all the students is

- A) 54.68    B) 53.33    C) 55    D) None of these

3) A library has an average of 430 visitors on Sundays and 270 on other days. The around average of the number of visitors per day in a month of 31 days beginning with a Saturday is:

- A) 260    B) 275    C) 285    D) 296

4) The average weight of 18 boys in a class is 45.55 kgs and that of the remaining 4 boys is 35.25 kgs. Find the average weight of all the boys in the class.

- A) 44.33 kgs    B) 42 kgs    C) 43.67 kgs    D) 49.23 kgs

5) A family consist of grandparents, parents and two grandchildren. The average age of the grandparents is 56 years, that of the parents is 27 years and that of the grandchildren is 7 years. What is the average of the family?

- A) 200/3 years    B) 233/6 years    C) 30 yrs    D) 40 yrs

### Type IV-New no is added or reduced

1) The average weight of 21 boys was recorded as 64 kg. If the weight of the teacher was added, the average increased by one kg. What was the teacher's weight?

- A) 86 Kg    B) 64 Kg    C) 72 Kg    D) 98 Kg

2) The average of five number is 42 ,if one number is excluded the average become 35. The excluded number is

- A) 7    B) 40    C) 70    D) 20

3) The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?

- A) 76 kg    B) 76.5 kg    C) 85 kg  
D) Data inadequate    E) None of these

4) The average age of 8 persons of a committee is increased by 2 years when two men aged 35 yrs and 45 yrs. are replaced by 2 women. Find average age of 2 women

- A) 48    B) 50    C) 44    D) 56

5) If average weight of a family is 'y' kg. If a guest weighing 30 kg arrives then the average weight is increases by 1 kg. If the weight of this guest had been 18 kg then the average weight of the family would have decreased by 1 kg. Find 'y'.

- A) 28    B) 24    C) 30    D) 22

6) The average age of 12 person is 32 years. If the age of one person is added, the average decreases by one year. What is the age of the new person?

- A) 19 years    B) 23 years    C) 25 years    D) 21 years

7) The average weight of 8 staff is increased by 3kg when one of them whose weight is 50kg is replaced by a new staff. The weight of the new staff is

- A) 50    B) 64    C) 76    D) 74

8) The average height of 15 students is calculated as 75. But later it was found that the height of 1 student wrongly entered as 35 instead of 38 and another as 46 instead of 63. The correct average is

- A) 71    B) 73    C) 75    D) 76

9) The average marks obtained by a student in 6 subjects is 88. On subsequent verification it was found that the marks obtained by him in a subject was wrongly copied as 86 instead of 68. The correct average of the marks obtained by him is

- A) 86    B) 87    C) 85    D) 84

10) The average weight of 39 Students in a class is 23. Among them Sita is the heaviest while Tina is the lightest.

If both of them are excluded from the class still the average remains same. The ratio of weight of Sita to Tina is 15:8. Then what is the weight of the Tina?

A) 15 B) 16 C) 18 D) 19

11) The ages of Four members of a family are in the year 2010 are 'X', 'X+12', 'X+24' and 'X+36'. After some years Oldest among them was dead then average reduced by 3. After how many years from his death, the average age will same as in 2010?

A) 2 Years B) 3 Years C) 4 years  
D) 6 Years E) Cannot be determined

12) The average weight of 3 students P, Q and R is 84kg. Another student S joins the group and the average becomes 80kg. If another man T whose weight is 3kg more than that of S, replaces P, then the average weight of Q, R, S and T becomes 79 kg then the weight of P is

A) 75 B) 82 C) 45 D) 98

#### **Type V-Groups**

1) The average of 15 numbers is 7. If the average of the first 8 numbers be 6.5 and the average of last 8 numbers be 9.5, then the middle number is

A) 20 B) 21 C) 23 D) 18

2) The mean high temperature of the first four days of a week is 25°C where as the mean the last four days is 25.5°C. If the mean of the whole week is 25.2°C then the temperature of the 4th day is

A) 25°C B) 25.2°C C) 25.5°C D) 25.6°C

3) In a certain year, the average monthly income of a person was Rs. 3400. For the first eight months of the year, his average monthly income was Rs. 3160 and for the last five months, it was Rs. 4,120. His income in the eighth month of the year was:

A) Rs. 3,160 B) Rs. 5,080  
C) Rs. 15,520 D) Rs. 5,520

4) The average weight of all the 11 players of CSK is 50 kg. If the average of first six lightest weight players of CSK is 49 kg and that of the six heaviest players of CSK is 52 kg. The average weight of the player which lies in the sixth position in the list of players when all the 11 players of CSK are arranged in the order of increasing or decreasing weights.

A) 54 kg B) 50 kg C) 53 kg D) 56 kg E) 52 kg

#### **Type VI(Equation Based)**

1) Out of three numbers, the first is twice the second and is half of the third. If the average of the three numbers is 56, then difference of the first and third number is

A) 12 B) 36 C) 24 D) 48

2) The average of first and second number is 25 more than the average of the second and third number. Find the difference between the first and the third number

A) 20 B) 30 C) 40 D) 50

3) The average weight of three students A, B and C is 88.5 kgs while the average weight of the other three students, D, F and G is 83.5 kg. What is the average weight of A, B, C, F and J?

A) 83.8 kg B) 82.4 kg C) 83.2 kg D) Data inadequate

#### **Type VII(Average Speed)**

1) A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 320 km of the tour is:

A) 35.55 km/hr B) 36 km/hr C) 71.11 km/hr D) 71 km/hr

2) Pranav went to the bank at the speed of 60 kmph while returning for his home he covered the half of the distance at the speed of 10 kmph, but suddenly he realized that he was getting late so he increased the speed and reached the home by covering rest half of the distance at the speed of 30 kmph. The average speed of the Pranav in the whole length of journey is?

A) 24 kmph B) 14 kmph C) 16 kmph  
D) 10 kmph E) 28 kmph

3) Bala travels first one-third of the total distance at the speed of 10 kmph and the next one-third distance at the speed of 20 kmph and the last one-third distance at the speed of 60 kmph. What is the average speed of Bala?

A) 18 kmph B) 19 kmph C) 16 kmph  
D) 12 kmph E) None of these

#### **Type VIII(Cricket Based Questions)**

1) Manish has a certain average for 11 innings. In the 12th innings he scores 120 runs and thereby increases his average by 5 runs. His new average is

A) 60 B) 62 C) 65 D) 66

2) A batsman in his 17th innings makes a score of 85, and thereby increases his average by 3. What is his average after 17 innings?

A) 30 B) 37 C) 40 D) 45 E) None of these

3) A cricketer whose bowling average is 24.85, runs per wicket, takes 5 wickets for 52 runs and thereby decreases his average by 0.85. The number of wickets taken by him till the last match was :

A) 64 B) 72 C) 80 D) 96

4) A cricketer whose bowling average is 12.4 runs per wicket, takes 5 wickets for 26 runs and thereby decreases his average by 0.4. The number of wickets taken by him till the last match was

A) 64 B) 72 C) 80 D) 85

#### **Type IX(Problems on Ages)**

1) There are 14 people in a family and the average age of all the family members is 30 years. A new baby born in a family, After 4 years what will be the average age of the all family members?

A) 30 years B) 35 years C) 28 years D) 33 years

2) 3 years ago, the average of a family of 5 members was 17 years. A baby having been born, the average age of the family is the same today. The present age of the baby is:

A) 5 years B) 2 years C) 1 year D) 4 years

3) Seven years ago, the average age of A, B and C was 51 years. If A is 3 years older than B and B is 3 years older than C then the present ages of A, B and C are (in years)

A) 61, 58 and 55 B) 54, 51, and 48  
C) 55, 58, and 61 D) 48, 51 and 54

**Type X-Miscellaneous Questions**

1) There are 459 students in a hostel. If the number of students increased by 36, the expenses of the mess increased by Rs81 per day while the average expenditure per head reduced by 1. Find the original expenditure of the mess?

A) 7304 B) 7314 C) 7324 D) 7334 E) 7344

2) There were 46 students in a Boys hostel. Due to the admission of eight new students the expenses of the hostel mess were increased by Rs.42 per day while the average expenditure per head diminished by Rs 1. What was the original expenditure of the hostel mess?

A) Rs.562 B) Rs.542 C) Rs.532  
D) Rs.452 E) Rs.552

**Answers**

Type I		Type III				Type VI		Type IX	
1	C	1	C	7	D	1	D	1	E
Type II		2	A	8	D	2	D	2	B
1	B	3	D	9	C	3	D	3	A
2	C	4	C	10	B	Type VII		Type X	
3	C	5	C	11	B	1	C	1	E
4	B	Type IV		12	A	2	A	2	E
5	C	1	A	Type V		3	A		
6	A	2	C	1	C	Type VIII			
7	C	3	C	2	D	1	C		
8	C	4	A	3	B	2	B		
9	A	5	B	4	D	3	C		
10		6	A			4	D		