

Class: 9
Subject: Mathematics
Topic: Statistics
No. of Questions: 20

- Q1. The following are the marks obtained by 50 students in Environmental Science.

Marks	Tally Marks	Number of students
2		7
3		2
4		8
5		9
6		5
7		8
8		2
9		9

What is the median of their scores?

- Q2. If there are n numbers of which one is $\left(1 - \frac{1}{n^2}\right)$ and all the others are 1's, then by how much is the arithmetic mean of these numbers less than 1.
- Q3. Find the mean of all the internal angles in a pentagon.
- Q5. Find the median of the following set
10, 14, 19, 20, 17, 22, 15, 17, 20, 21, 13, 12
- Q6. Gita got an average score of 79 in 4 tests. She got 80 as the average of the highest 3 scores, and his lowest two scores are the same numbers. What is the average of her highest two scores?
(a) 81.5
(b) 82
(c) 82.5
(d) 81
- Q7. Raj is part of the school cricket team, and this year he has scored an average of 36 runs. He has played 8 innings so far, and his scores in 7 of them are 26, 44, 42, 37, 46, 34, 43
What was his score in the last one?
(a) 21
(b) 14
(c) 12
(d) 16

Q8. The following table shows profits of 5 companies in a business group last year.

Company	Profit
Company 1	Rs. 500,000
Company 2	Rs. 250,000
Company 3	Rs. 350,000
Company 4	Rs. 300,000
Company 5	Rs. 450,000

What is the average profit of the business group?

- (a) Rs. 371500
(b) Rs. 370000
(c) Rs. 370200
(d) Rs. 369600
- Q9. A teacher measures the heights of 11 students in her class as follows (in centimeters)
133, 153, 154, 114, 113, 147, 115, 141, 127, 159, 119
The median height of the students is ____ cm.
- Q10. Find the mean of the factor of 12.
- Q11. The mean of the age of three students Reema, Dipanshu and Bhavya is 15 years. If their ages are in the ratio 4:5:6 respectively, then find their respective ages.
- Q12. The following table gives the marks scored by 100 students in an entrances examination.

Mark:	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students(Frequency)	4	10	16	22	20	18	8	2

Represent this data in the form of a histogram.

Q13. The following in the distribution of weights (in kg) of 50 persons:

Weight (in kg):	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
Number of Persons:	12	8	5	4	5	7	6	3

Draw a histogram for the above data.

Q14. The mean of 6, 10, x and 12 is 8. Find the value of x.

Q15. In a class of 100 students there are 70 boys whose average marks in a subject are 75. If the average marks of the complete class are 72, then the average marks of the girls is –

- (a) 73
- (b) 65
- (c) 68
- (d) 74

Q16. A set of number consists of three 4's, five 5's, six 6's, eight 8's, and seven 10's. The mode of this set of numbers is-

- (a) 6
- (b) 7
- (c) 8
- (d) 10

Q17. The marks obtained by a set of students in an examination are given below:

Marks	5	10	15	20	25	30
No. of students	6	4	6	12	X	4

If the mean of the above data is 18, calculate the numerical Value of x.

Q18. Find the value of K from the following data if mean of the given data is 16.

X	5	10	15	20	25
y	2	8	k	10	5

Q19. Draw a histogram for the following data:

Class interval	25-29	30-34	35-39	40-44	45-49	50-54
Frequency	5	15	23	20	10	7

Q20. The mean of discrete observations y_1, y_2, \dots, y_n is given by –

(a) $\frac{\sum_{i=1}^n y_i}{n}$

(b) $\frac{\sum_{i=1}^n y_i}{\sum_{i=1}^n i}$

(c) $\frac{\sum_{i=1}^n y_i f_i}{n}$

(d) $\frac{\sum_{i=1}^n y_i f_i}{\sum_{i=1}^n f_i}$

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