



INDIAN SCHOOL AL WADI AL KABIR
Dept. of Mathematics 2021 – 2022
Class XI – Revision Work Sheet (WS_5)
Statistics



1	Percentile rank refers to (a) the percentage of scores that fall above a certain score (b) the percentage of scores that fall at or above a certain score (c) the percentage of scores that fall at or below a certain score (d) the percentage of scores that equal a certain score.
2	The score of a MCQ test of 10 students are given below: 37,48,35,49,29,46, 49, 40,33, 50. The percentile rank of score 49 is (a)75 (b)80 (c)85 (d)90
3	The coefficient of correlation is independent of (a) change of scale but not of origin (c) change of origin and scale both (b) change of origin but not of scale (d) neither change of origin nor of scale
4	Which of the following is true for coefficient of correlation r ? (a) $r > 1$ (b) $r \leq -1$ (c) $-1 < r < 1$ (d) $-1 \leq r \leq 1$
5	The coefficient of correlation is (a) greater than the coefficient of determination (b) the square of the coefficient of determination (c) the square root of the coefficient of determination (d) equal to the coefficient of determination
6	If $\sum u_i v_i = 50$ and $n = 15$ where u_i and v_i are deviations of X and Y series from their respective mean, then $\text{Cov}(X, Y)$ is (a) 2.43 (b)3.33 (c)3.24 (d)3.63
7	If coefficient of correlation between two variables X and Y is 0.25, their covariance is 25 and $\text{var}(X)$ is 16, then standard deviation of Y- series is (a)25 (b)2.5 (c)0.25 (d)0.0025
8	The standard deviation of first 10 natural numbers is (a) 5.5 (b) 3.87 (c) 2.97 (d) 2.87
9	The mean deviation of the numbers 3, 4, 5, 6, 7 from the mean is (a) 25 (b) 5 (c) 1.2 (d) 0

10	A batsman scores runs in '10 innings as 38, 70, 48, 34, 42, 55, 63, 46, 54 and 44. The mean deviation about mean is (a) 8.6 (b) 6.4 (c) 10.6 (d) 7.6
11	Consider the first 10 positive integers. If we multiply each number by -1 and then add 1 to each number, the variance of the numbers so obtained is (a) 8.25 (b) 6.5 (c) 3.87 (d) 2.87
12	Consider the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. If '1 is added to each number, the variance of the numbers so obtained is (a) 6.5 (b) 2.87 (c) 3.87 (d) 8.25
13	The mean of 100 observations is 50 and their standard deviation is 5. The sum of all squares of all the observations is (a) 50,000 (b) 250,000 (c) 252500 (d) 255000
14	The mean deviation of the data 3, '10, '10, 4, 7, '10, 5 from the mean is (a) 2 (b) 2.57 (c) 3 (d) 3.57
15	The standard deviation of the observations 6, 5, 9, 13, 12, 8, 10 is (a) 6 (b) $\sqrt{6}$ (c) $\frac{52}{7}$ (d) $\sqrt{\frac{52}{7}}$
16	The mean deviation of the data 2, 9, 9, 3, 6, 9, 4 from the mean is (a) 2.23 (b) 2.57 (c) 3.23 (d) 3.57
17	Variance of the data 2, 4, 5, 6, 8, '17 is 23.33. The variance of 4, 8, '10, '12, '16, 34 will be (a) 23.33 (b) 25.33 (c) 46.66 (d) 93.32
18	When tested, the lives (in hours) of 5 bulbs were noted as follows: 1357, 1090, 1666, 1494, 1623. The mean deviations (in hours) from their mean is (a) 178 (b) 179 (c) 220 (d) 356
19	The following are the marks obtained by 9 students in Mathematics test: 50, 69, 20, 33, 53, 39, 40, 65, 59. The mean deviation from the median is (a) 9 (b) 10.5 (c) 12.67 (d) 14.67
20	Calculate Karl Pearson's coefficient of skewness for the distribution for which mean = 100, mode = 126 and $\sigma = 30$ (a) 0.78 (b) - 0.78 (c) 0.87 (d) - 0.87

Answers									
1(c)	2(b)	3(c)	4(d)	5(c)	6(b)	7(a)	8(d)	9(c)	10(a)
11(b)	12(c)	13(a)	14(b)	15(d)	16(b)	17(d)	18(b)	19(c)	20(d)