



## INDIAN SCHOOL AL WADI AL KABIR

Department of Mathematics, 2023-2024

**CLASS: XI**

**CBQ – Statistics 13-08-2023**

<b>Q.1.</b>	The mean deviation about the mean for data: 6, 7, 10, 12, 13, 4, 8, 12							
	<b>A</b>	3	<b>B</b>	2.75	<b>C</b>	0	<b>D</b>	1
<b>Q.2.</b>	The mean deviation about the median for the following data: 3, 9, 5, 3, 12, 10, 18, 4, 7, 19, 21.							
	<b>A</b>	9	<b>B</b>	5	<b>C</b>	5.27	<b>D</b>	10
<b>Q.3.</b>	The variance of 30 observations is 5. If each observation is multiplied by 2, find the new variance of the resulting observations.							
	<b>A</b>	20	<b>B</b>	5	<b>C</b>	10	<b>D</b>	30
<b>Q.4.</b>	For a grouped frequency distribution, $\sum f_i = 30$ and $\sum f_i(x_i - \bar{x})^2 = 1371$ , then variance							
	<b>A</b>	1341	<b>B</b>	457	<b>C</b>	45.7	<b>D</b>	4570
<b>Q.5.</b>	The mean of 5 observations is 4.4 and their variance is 8.24. If three of the observations are 1, 2 and 6, then other two observations							
	<b>A</b>	4 and 9	<b>B</b>	3 and 6	<b>C</b>	5 and 8	<b>D</b>	6 and 7
<b>Q.6.</b>	The mean of first $n$ natural numbers is							
	<b>A</b>	$n$	<b>B</b>	$n + 1$	<b>C</b>	$n - 1$	<b>D</b>	$\frac{n + 1}{2}$
<b>Q.7.</b>	If each of the observation $x_1, x_2, x_3, \dots, x_n$ is increased by 'a', where a is a negative or positive number, then the variance							
	<b>A</b>	Will be increased by a	<b>B</b>	remains unchanged	<b>C</b>	Will be decreased by a	<b>D</b>	Will becomes a times
<b>Q.8.</b>	The mean of 100 observations is 110. If one observation 103 is to be changed as 130, what will be the new mean?							
	<b>A</b>	111	<b>B</b>	110.27	<b>C</b>	100.27	<b>D</b>	90

<b>Q.9.</b>	The mean of the squares of the deviations from mean is called																			
	<b>A</b>	<i>standard deviation</i>	<b>B</b>	<i>mode</i>	<b>C</b>	median	<b>D</b>	<i>variance</i>												
<b>Q10.</b>	The range of the data 4, 7, 8, 9, 10, 12, 13 and 17 is																			
	<b>A</b>	4	<b>B</b>	7	<b>C</b>	13	<b>D</b>	21												
<b>Q.11</b>	The sum of 10 observations 55 and sum of squares of these observations is 385. Then variance is .																			
	<b>A</b>	335	<b>B</b>	33.5	<b>C</b>	8.25	<b>D</b>	0												
<b>Q.12</b>	<i>The standard deviation of 7, 9, 11, 13, 15</i>																			
	<b>A</b>	2.83	<b>B</b>	3.23	<b>C</b>	2.53	<b>D</b>	8												
<b>Q13.</b>	<i>The average of 5 observations is 6 and average of three of them is 4, then average of remaining two numbers</i>																			
	<b>A</b>	7	<b>B</b>	8	<b>C</b>	9	<b>D</b>	10												
<b>Q14.</b>	What is the variance for the following:																			
	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>f</td> <td>2</td> <td>2</td> <td>3</td> <td>2</td> <td>1</td> </tr> </table>								x	0	1	2	3	4	f	2	2	3	2	1
x	0	1	2	3	4															
f	2	2	3	2	1															
	<b>A</b>	1.8	<b>B</b>	1.56	<b>C</b>	4.8	<b>D</b>	2.4												
<b>Q15.</b>	The mean of 100 observations is 50 and their standard deviation is 5. The sum of squares of all observations is																			
	<b>A</b>	50000	<b>B</b>	250000	<b>C</b>	252500	<b>D</b>	255000												
<b>Answers</b>	<b>1</b>	B	<b>2</b>	C	<b>3.</b>	A	<b>4</b>	C												
	<b>5</b>	A	<b>6</b>	D	<b>7</b>	B	<b>8</b>	B												
	<b>9</b>	D	<b>10</b>	C	<b>11</b>	C	<b>12</b>	A												
	<b>13</b>	C	<b>14</b>	B	<b>15</b>	C														

\*\*\*\*\*