



INDIAN SCHOOL AL WADI AL KABIR

Class: IX	Department: MATHEMATICS	Date of submission: 24-11-2019
	Topic: Statistics and Probability	

Multiple Choice Questions								
Q.1.	The marks obtained by 17 students in a mathematics test (out of 100) are given below: 91, 82, 100, 100, 96, 65, 82, 76, 79, 90, 46, 64, 72, 68, 66, 48, 49. The range of the data is:							
	A	46	B	54	C	90	D	100
Q.2.	The class-mark of the class 130-150 is:							
	A	135	B	140	C	145	D	150
Q.3.	In a frequency distribution, the mid value of a class is 10 and the width of the class is 6. The lower limit of the class is:							
	A	6	B	7	C	8	D	12
Q.4.	In the class intervals 10-20, 20-30, the number 20 is included in:							
	A	10-20	B	20-30	C	both the intervals	D	none of these intervals
Q.5.	The mean of five numbers is 30. If one number is excluded, their mean becomes 28. The excluded number is:							
	A	28	B	30	C	35	D	38
Q.6.	If each observation of the data is increased by 5, then their mean							
	A	remains the same	B	is 5	C	is decreased by 5	D	is increased by 5
Q.7.	The mean of 100 observations is 50. If one of the observations which was 50 is replaced by 150, the resulting mean will be:							
	A	50.5	B	51	C	51.5	D	52

Q.8.	The median of the data 78, 56, 22, 34, 45, 54, 39, 68, 54, 84 is																			
	A	45	B	49.5	C	54	D	56												
Q.9.	Mode of the data 15, 14, 19, 20, 14, 15, 16, 14, 15, 18, 14, 19, 15, 17, 15 is																			
	A	14	B	15	C	16	D	17												
Q.10.	In a sample study of 642 people, it was found that 514 people have a high school certificate. If a person is selected at random, the probability that the person has a high school certificate is:																			
	A	0.5	B	0.6	C	0.1	D	0.8												
Q.11.	In a survey of 364 children aged 19-36 months, it was found that 91 liked to eat potato chips. If a child is selected at random, the probability that he/she does not like to eat potato chips is:																			
	A	0.25	B	0.50	C	0.75	D	0.8												
Q.12.	Can the experimental probability of an event be a negative number? If not, why?																			
Q.13.	Heights (in cm) of 30 girls of Class IX are given below: 140, 140, 160, 139, 153, 153, 146, 150, 148, 150, 152, 146, 154, 150, 160, 148, 150, 148, 140, 148, 153, 138, 152, 150, 148, 138, 152, 140, 146, 148. Prepare a frequency distribution table for this data.																			
Q.14.	The following observations are arranged in ascending order : 26, 29, 42, 53, x , $x + 2$, 70, 75, 82, 93 If the median is 65, find the value of x .																			
Q15.	Obtain the mean of the following distribution: <table><tr><td>Frequency</td><td>Variable</td></tr><tr><td>4</td><td>4</td></tr><tr><td>8</td><td>6</td></tr><tr><td>14</td><td>8</td></tr><tr><td>11</td><td>10</td></tr><tr><td>3</td><td>12</td></tr></table>								Frequency	Variable	4	4	8	6	14	8	11	10	3	12
Frequency	Variable																			
4	4																			
8	6																			
14	8																			
11	10																			
3	12																			
Q.16.	Mean of 50 observations was found to be 80.4. But later on, it was discovered that 96 was misread as 69 at one place. Find the correct mean.																			
Q.17.	A company selected 4000 households at random and surveyed them to find out a relationship between income level and the number of television sets in a home. The information so obtained is listed in the following table:																			

	Monthly income(in ₹)		Number of Television per household							
			0	1	2	Above 2				
	<10000		20	80	10	0				
	10000 -14999		10	240	60	0				
	15000- 19999		0	380	120	30				
	20000-24999		0	520	370	80				
	25000 and above		0	1100	760	220				
	Find the probability: (i) of a household earning ₹ 10000 – ₹ 14999 per year and having exactly one television. (ii) of a household earning ₹ 25000 and more per year and owning 2 televisions. (iii) of a household not having any television.									
Q.18.	A survey of 200 people was conducted about their preference of visiting various pavilions.									
	Pavilion	Good living	Delhi Pavilion	Toy Pavilion	Defence					
	Number of people	95	45	40	20					
	Find the probability that selected person visited: (a)Both good living and Delhi pavilion (b) Only Defence pavilion. (c)Only Toy pavilion (d) Both Toy and defence pavilion									
Q.19.	Draw a histogram to represent the above data.									
	Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
	No. of students	5	10	4	6	7	3	2	2	9
Q.20.	The points scored by a basketball team in a series of matches are as follows. 17, 2, 7, 27, 25, 5, 14, 18, 10, 24, 10, 8, 7, 10 Find the mean, median and mode for the data.									
Q.21.	Construct a histogram and frequency polygon for the following.									
	Weight(in kg)	40-45	45-50	50-55	55-60	60-65	65-70			
	No. of students	15	25	28	15	12	5			
Answers										
Q.1. B	Q.2. B	Q.3. B	Q.4.B	Q.5.D	Q.6.D	Q.7. B	Q.8.C	Q.9.B	Q.10. D	
Q.11. C	Q.14. 64	Q.15. 8.05	Q.16. 80.94	Q.17. $\frac{3}{50}, \frac{19}{100}, \frac{3}{400}$			Q.18. $\frac{7}{10}, \frac{1}{10}, \frac{1}{5}, \frac{3}{10}$			Q.20. 13.14, 10, 10