STATISTICS



MCQs & A and R WORK SHEET

Test / Exam Name: S	Statistics	Standard: 10th	Subject: Mathema	ntics
Student Name:		Section:	Roll No.:	
		Questions	:: 45 Time: 01:00 hh:mm Negativ	ve Marks: 0 Marks: 4
Instructions				
1. MULTIPLE CHOICE G	UESTIONS.			
Q1. The relation between	mean, mode and media	n is:		1 Mark
A Mode = $(3 \times \text{mean})$ - D Mode = $(3 \times \text{median})$ Q2.If the mean of a data	- (2 × mode)	$de = (3 \times median) - (2 \times mean)$	$Mode = (3 \times mean) - (2 \times mode)$	1 Mark
A 30	B 43	C 45	D 47	1 1/1
		24 and 12 respectively, then its med		1 Mark
A 25	B 18	C 20	D 22	
Q4.If the difference of m	ode and median of a da	ta is 24, then the difference of medi	an and mean is:	1 Mark
A 12	B 24	C 8	D 36	
Q5. The arithmetic mean	of 1, 2, 3,, n is:			1 Mark
$\mathbf{A} \frac{\mathrm{n+1}}{2}$	B $\frac{n-1}{2}$	\mathbf{C}	${f D} {{rac{{ m n}}{2}}} + 1$	
Q6. The mean of first n o	dd natural number is:			1 Mark
$\mathbf{A} = \frac{\mathrm{n}+1}{2}$	$\mathbf{B} \frac{\mathbf{n}}{2}$	C n	$\mathbf{D} \ \mathrm{n}^2$	
Q7. To represent the more	e than type graphically,	we plot the on the x-axis.		1 Mark
A Class marks	B Lower limits	C Upper limits	D Class size	
Q8. The mean of first n o	dd natural numbers is $\frac{n}{8}$	$\frac{1}{1}$, then n =		1 Mark
A 9	B 81	C 27	D 18	
Q9. The middle most value	e of the data is:			1 Mark
A Mean	B Mode	C Median	D None of these	
Q10. Upper class limit+Lower of 2		Civiculan	D None of these	1 Mark
2				2 1/24/11
A class size	B Class mark	C Frequency	D None of these	
Q11. If $\sum f_i x_i = 625$ and		• •	2 1,010 01 11100	1 Mark
A 26	B 63	C 64	D 25	
Q12. Choose the correct a	answer from the given for ing frequency distribution	•		1 Mark
Class	0-5 6-11		24-29	
Frequency	13 10	15 8	11	
	a madian alaga igi			
The upper limit of th		G 10	D 10 f	
A 17	\mathbf{B} 17.5	C 18	D 18.5	1 Mark
Q13.In the formula $\bar{x} = a$	$\mathbf{a} + \frac{\mathbf{a}}{\sum f_i}, \mathbf{d}_i$ represents:			1 Mark
$\mathbf{A} \ \mathbf{a} + \mathbf{x}_{\mathrm{i}}$	$\mathbf{B} \operatorname{d_i} = \mathbf{x_i} - \mathbf{a}$	$C a - x_i$	$\mathbf{D} \mathbf{x}_1 + \mathbf{a}$	
Q14. In the formula $\bar{x} = a$	$\mathrm{a} + \mathrm{h}\Big(rac{1}{\mathrm{N}}\sum \mathrm{f_i}\mathrm{u_i}\Big), \mathrm{for} \mathrm{fi}$	nding the mean of grouped frequence	ey distribution $u_i =$	1 Mark
$\mathbf{A} \frac{\mathbf{x_i} + \mathbf{a}}{\mathbf{h}}$	$\mathbf{B}\ \mathrm{h}(\mathrm{x_i}-\mathrm{a})$	$\mathbf{C} = \frac{\mathbf{x_i} - \mathbf{a}}{\mathbf{h}}$	$\mathbf{D} = \frac{\mathbf{a} - \mathbf{x_i}}{\mathbf{b}}$	
Q15. In formula $\bar{\mathbf{x}} = \mathbf{a} +$		п	п	1 Mark
A Class size	B Class mark	C Mean	D None of these	
Q16. In the formul $\bar{x} = a$	— .		D Trone of mese	1 Mark
	<u> </u>		D 14	
A Assumed mean	B Class size	C Class mark	D Mean	

4	B 5			C 6	Ó		D 7		
18. Mode is:									1 Ma
Least frequent val		Middle mount umbers is			Most freque	nt value.	D No	ne of these.	1 Ma
. 5	B 4			C 9)		D 10		
20. The percentage of	of marks obtai	ned by 10	00 student	ts in an exar	mination are	e as follow	rs:		1 Ma
Mark	30-35	35-40	40-45	45-50	50-55	55-60	60-65		
Frequency	10	15	18	22	23	8	4		
The median class	s is:								
35-40	B 4	5-50		C 4	10-45		D 50-	55	
1.Look at the frequ			given belo						1 Ma
Class interval		35-	45	45-55	55-65	6.	5-75	٦	
Frequency		8		12	20	1	0		
The median of the	ne above dist	ibution is:			'	<u> </u>		→	
				~ -			* -0		
56.5 2. For the following	B 5 g distribution:	7.5		C 5	08.5		D 59	-	1 Ma
Class	60-70	70-	-80	80-90	90-100	100-	110		
Frequency	13	10		15	8	11		╛	
23. Mode =?	B 8		$(\mathbf{f_k} - \mathbf{f_{k-1}})$	C 9		$(\mathbf{f_k} - \mathbf{f_{k-1}})$	D 70	$(\mathbf{f_k} - \mathbf{f_{k-1}})$	1 M a
100 23. Mode =? $\mathbf{x}_k + \mathbf{h} \cdot \begin{cases} \frac{(\mathbf{f}_{k-1} - \mathbf{f}_{k-1})}{(2\mathbf{f}_k - \mathbf{f}_{k-1})} \end{cases}$ 24. In a data, if $\mathbf{l} = 6$	$\left\{egin{array}{l} f_{ m k} ight) \ -f_{ m k+1} ight\} \qquad {f B}_{ m -X} \end{array}$	$t_{\mathbf{k}}+\mathbf{h}.\left\{ rac{1}{2}$	`	$\left(\frac{1}{1}\right)$ C x	${f x}_{f k}+{f h}.\left\{ rac{{f g}_{f k}}{{f g}_{f k}} ight.$	$rac{(\mathrm{f_k}\!-\!\mathrm{f_{k-1}})}{-2\mathrm{f_{k-1}}\!-\!\mathrm{f_{k-1}})}$		$+ ext{ h. } \Big\{ rac{(f_k - f_{k-1})}{(f_k - f_{k-1} - 2f_{k+1})}$	
23. Mode =? $\mathbf{x}_{k} + \mathbf{h}. \left\{ \frac{(\mathbf{f}_{k-1} - \mathbf{f}_{k-1})}{(2\mathbf{f}_{k} - \mathbf{f}_{k-1})} \right\}$ 24. In a data, if $l = 6$	$\left\{egin{array}{l} rac{f_{\mathrm{k}})}{-f_{\mathrm{k}+1}} ight\} & \mathbf{B}_{\mathrm{X}} \ 0, \ \mathrm{h} = 15, \ \mathrm{f}_{1} = 0, \ \mathrm{f}_{2} = 0, \ \mathrm{f}_{3} = 0, \ \mathrm{f}$	$f_k + h. \left\{ \frac{1}{6} \right\}$	`	$\left(\frac{1}{1}\right)$ C x then the m	$x_k + h.$ $\left\{ rac{1}{(f_k)} ight\}$	$rac{(\mathrm{f_k}\!-\!\mathrm{f_{k-1}})}{-2\mathrm{f_{k-1}}\!-\!\mathrm{f_{k-1}})}$	$\left\{ \begin{array}{ccc} \mathbf{D} & \mathbf{x}_{\mathrm{k}} \end{array} \right\}$	$+ ext{ h. } \Big\{ rac{(f_k - f_{k-1})}{(f_k - f_{k-1} - 2f_{k+1})}$	$\overline{}$
23. Mode =? $x_k + h. \left\{ \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \right\}$ 24. In a data, if $l = 6$	$\left\{ egin{array}{ll} rac{f_{k})}{-f_{k+1}} ight\} & \mathbf{B}_{\mathbf{X}} \ \mathbf{B}_{0}, \ \mathbf{h} = 15, \ \mathbf{f}_{1} = \mathbf{B}_{0} \ \mathbf{F}_{0} \end{array}$	$f_k + h. \left\{ \frac{1}{6} \right\}$	`	$\left(\frac{1}{1}\right)$ C x	$x_k + h.$ $\left\{ rac{1}{(f_k)} ight\}$	$rac{(\mathrm{f_k}\!-\!\mathrm{f_{k-1}})}{-2\mathrm{f_{k-1}}\!-\!\mathrm{f_{k-1}})}$		$+ ext{ h. } \Big\{ rac{(f_k - f_{k-1})}{(f_k - f_{k-1} - 2f_{k+1})}$) } 1 Ma
3.Mode =? $x_k + h. \left\{ \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \right\}$ 4.In a data, if $l = 6$ 67.5 5.For the following	$\left\{\begin{array}{c} \frac{f_k)}{-f_{k+1}} \end{array}\right\}$ $\left\{\begin{array}{c} \mathbf{B} \\ \mathbf{x} \end{array}\right\}$ $\left\{\begin{array}{c} \mathbf{B} \\ 7 \end{array}\right\}$ $\left\{\begin{array}{c} \mathbf{B} \\ 7 \end{array}\right\}$	$f_k + h. \left\{ \frac{1}{6} \right\}$ = 16, $f_0 = \frac{1}{2}$	$f_{2} = 6, f_{2} = 6,$	$\left(\frac{1}{1}\right)$ C x then the m	$x_k + h.$ $\left\{ \frac{1}{(f_k)} \right\}$		D D D D 62	$+ ext{ h. } \Big\{ rac{(f_k - f_{k-1})}{(f_k - f_{k-1} - 2f_{k+1})}$	$\frac{1}{1}$
3.Mode =? $x_k + h. \left\{ \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \right\}$ 4.In a data, if $l = 6$ 67.5 5.For the following	$ \frac{\mathbf{f}_{k})}{\mathbf{f}_{k+1}} $ \mathbf{B}_{x} $\mathbf{B}_{0}, \mathbf{h} = 15, \mathbf{f}_{1} = \mathbf{B}_{3}$ $\mathbf{g}_{distribution}$ $60-70$	$f_k + h. \begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$	$6, f_2 = 6,$ -80	$\left(\frac{1}{1}\right)$ C x then the m	$x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is:	$\frac{(f_k - f_{k-1})}{-2f_{k-1} - f_{k-1}}$	D D D D 62	$+ ext{ h. } \Big\{ rac{(ext{f}_k - ext{f}_{k-1})}{(ext{f}_k - ext{f}_{k-1} - 2 ext{f}_{k+1})}$) } 1 Ma
3. Mode =? $x_k + h. \left\{ \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \right\}$ 4. In a data, if $l = 6$ 67.5 5. For the following	$\left\{ egin{array}{ll} rac{f_{k})}{-f_{k+1}} ight\} & {f B}_{-{f X}} \\ {f B}_{-0}, \ h = 15, \ f_{1} = 15, \ f_{2} = 15, \ f_{3} = 15, \ f_{4} = 15, \ f_{5} = 15, \ f_{7} = 10, \ f_$	$f_k + h. \begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$	-80	$\frac{1}{(1+1)}$ C x then the m C 6	$x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is:	100-	D D D D 62	$+ ext{ h. } \Big\{ rac{(f_k - f_{k-1})}{(f_k - f_{k-1} - 2f_{k+1})}$) } 1 Ma
3. Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \end{cases}$ 4. In a data, if $l = 6$ 67.5 5. For the following Mark Frequency The sum of lower	$\left\{ egin{array}{ll} rac{f_{k})}{-f_{k+1}} ight\} & {f B}_{-{f X}} \\ {f B}_{-0}, \ h = 15, \ f_{1} = 15, \ f_{2} = 15, \ f_{3} = 15, \ f_{4} = 15, \ f_{5} = 15, \ f_{7} = 10, \ f_$	$f_k + h.$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ median of	-80	$\frac{1}{(1+1)}$ C x then the m C 6	$x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $\frac{90-100}{20}$ is:	100-	D D D D 62) } 1 Ma
3. Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \end{cases}$ 4. In a data, if $l = 6$ 67. 5 5. For the following Mark Frequency The sum of lower	$ \frac{\mathbf{f}_{k})}{\mathbf{f}_{k+1}} $ $\mathbf{B} $ $\mathbf{g} $ $\mathbf{g} $ $\mathbf{distribution}:$ $60-70$ 10 $\mathbf{r} $ $\mathbf{limits} $ $\mathbf{f} $ $\mathbf{h} $ $\mathbf{h} $ $\mathbf{l} $	$f_{k} + h.$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ = 16, $f_{0} = \frac{1}{2}$ = 2 $\frac{70}{15}$ median of 80	-80 elass and r	$\frac{1}{(1+1)}$ C x then the m C 6 80-90 12 modal class	$x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $\frac{90-100}{20}$ is:	9	$\mathbf{D} = \mathbf{D} \times \mathbf{A}$ $\mathbf{D} = 62$ $\mathbf{D} = 190$) } 1 Ma
3. Mode =? $x_k + h$. $\left\{ \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \right\}$ 4. In a data, if $l = 6$ 67. 5 5. For the following Mark Frequency The sum of lower 20 6. While computing	$ \frac{\mathbf{f}_{k})}{\mathbf{f}_{k+1}} \mathbf{B} \mathbf{x} $ $ \mathbf{B} 7 $ $ \mathbf{g} \text{ distribution:} $ $ 60-70 $ $ 10 $ er limits of the $ \mathbf{B} 1 $ g the mean of	$f_k + h.$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ = 16, $f_0 = \frac{1}{2}$ 2 The equation of the group the group $f_0 = \frac{1}{6}$ and $f_0 = $	-80 elass and r	then the m C 6 80-90 12 modal class C 1 we assume the mass of the mass	$x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $\frac{90-100}{20}$ is:	100- 9	$\mathbf{D} = \mathbf{D} \times \mathbf{A}$ $\mathbf{D} = 62$ $\mathbf{D} = 190$		1 Ma
3.Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \end{cases}$ 4.In a data, if $l = 6$ 67.5 5.For the following Mark Frequency The sum of lower 20 6. While computing Evenly distributed Centred at the low	$ \frac{f_k)}{f_{k+1}} $ $ \frac{f_k}{f_{k+1}} $ $ \frac{f_k}{f_k} $ $ \frac{f_k}{f_{k+1}} $ $ \frac{f_k}{f_k} $ $ \frac{f_k}{f_k$	$f_k + h.$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ $\begin{cases} \frac{70}{6} \\ \frac{15}{6} \end{cases}$ median of the group ses.	-80 elass and red data, w	then the model class C 1 We assume to the model of the model class C 1 We assume to the model of the model class	$x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $x_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ $x_k $	100- 9 quencies ar	$\mathbf{D} = \mathbf{D} \times \mathbf{A}$ $\mathbf{D} = 62$ $\mathbf{D} = 190$ Therefore:	sses.	1 Ma 1 Ma
3.Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1} - f_{k-1})}{(2f_k - f_{k-1} - f_{k-1})} \end{cases}$ 4.In a data, if $l = 6$ 67.5 5.For the following Mark Frequency The sum of lower 20 6.While computing Evenly distributed Centred at the low 7.Median =?	$\frac{f_k)}{f_{k+1}}$ \mathbf{B} \mathbf{x} \mathbf{B} 7 \mathbf{B} 7 \mathbf{B} 7 60 , $\mathbf{h} = 15$, $\mathbf{f}_1 = 60$ 70 10 \mathbf{B} 1 60 70 10 \mathbf{C} 10	$f_k + h$. $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ = 16, $f_0 = \frac{1}{2}$ = 2 $\begin{cases} \frac{70}{15} \\ \frac{15}{16} \end{cases}$ median of the group ses. He classes.	66, 6 , 6 , 6 , 6 , 6 , 6 , 6 ,	then the m C 6 80-90 12 modal class C 1 we assume to the manner of the manner o	$a_k + h.$ $\left\{ \frac{1}{(f_k)} \right\}$ dode is: $a_k + h.$ $\left\{ \frac{1}{(f_k)} \right\}$ $a_k + h.$ $\left\{ \frac{1}{$	100- 9 uencies ar class mark he upper li	\mathbf{D} \mathbf{D} \mathbf{N} \mathbf{D}	sses.	1 Ma
3.Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_k)}{(2f_k - f_{k-1} - f_k)} \end{cases}$ 4.In a data, if $l = 6$ 67.5 5.For the following Mark Frequency The sum of lower 20 6.While computing Evenly distributed Centred at the low 7.Median =? $l + \begin{cases} h \times \frac{\left(\frac{N}{2} - cf\right)}{f} \end{cases}$	$ \frac{\mathbf{f}_{k})}{\mathbf{f}_{\mathbf{f}_{k+1}}} \right\} \mathbf{B} \mathbf{x} \\ \mathbf{B} 7 \\ \mathbf{B} 7 \\ \mathbf{G} \mathbf{distribution} : \\ 60-70 \\ 10 $ The limits of the ser limits of th	$f_{k} + h.$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ $\begin{cases} \frac{70}{15} \\ \frac{15}{15} \end{cases}$ median of the group ses. He classes.	elass and red data, where $\frac{\left(\text{cf}-\frac{N}{2}\right)}{\text{f}}$	then the m C 6 80-90 12 modal class C 1 we assume to B Cen D C C 1	$a_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $a_k + h.$ $\left\{1$	$\frac{100-9}{9}$ Tuencies are class mark the upper lift $\frac{\frac{N}{2}-cf}{f}$	\mathbf{D} \mathbf{D} \mathbf{N} \mathbf{D}	sses.	1 Ma 1 Ma 1 Ma
3.Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \end{cases}$ 4.In a data, if $l = 6$ 67.5 5.For the following Mark Frequency The sum of lowe 20 6.While computing Evenly distributed Centred at the low 7.Median =? $l + \begin{cases} h \times \frac{\left(\frac{N}{2} - cf\right)}{f} \end{cases}$	$ \frac{\mathbf{f}_{k})}{\mathbf{f}_{\mathbf{f}_{k+1}}} \right\} \mathbf{B} \mathbf{x} \\ \mathbf{B} 7 \\ \mathbf{B} 7 \\ \mathbf{G} \mathbf{distribution} : \\ 60-70 \\ 10 $ The limits of the ser limits of th	$f_{k} + h.$ $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ $\begin{cases} \frac{70}{15} \\ \frac{15}{15} \end{cases}$ median of the group ses. He classes.	elass and red data, where $\frac{\left(\text{cf}-\frac{N}{2}\right)}{\text{f}}$	then the m C 6 80-90 12 modal class C 1 we assume to B Cen D C C 1	$a_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $a_k + h.$ $\left\{1$	$\frac{100-9}{9}$ Tuencies are class mark the upper lift $\frac{\frac{N}{2}-cf}{f}$	\mathbf{D} \mathbf{D} \mathbf{N} \mathbf{D}	sses.	1 Ma 1 Ma
3. Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1} - f_{k-1})}{(2f_k - f_{k-1} - f_{k-1})} \end{cases}$ 4. In a data, if $l = 6$ 67. 5 5. For the following Mark Frequency The sum of lower 20 6. While computing Evenly distributed Centred at the low 7. Median =? $l + \begin{cases} h \times \frac{\left(\frac{N}{2} - cf\right)}{f} \end{cases}$ 8. If the mode of the	$ \frac{f_{k})}{f_{k+1}} $ $ \frac{f_{k})}{f_{k+1}} $ $ \frac{f_{k}}{f_{k+1}} $ $\frac{f_{k}}{f_{k+1}} $ f	$f_{k} + h$. $\begin{cases} 7 \\ 6 \end{cases}$ $= 16, f_{0} = 16$ $= 16,$	elass and noted data, where $\left(\frac{cf - \frac{N}{2}}{f}\right)$ 15, x, 19	then the m C 6 80-90 12 modal class C 1 we assume to B Cen D C 1, 17, 14 is 1 C 1	$a_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dode is: $a_k + h.$ $\left\{\frac{1}{(f_k)}\right\}$ dote is: $a_k + h.$ $\left\{1$	$\frac{100-9}{9}$ The class mark the upper lift $\frac{\frac{N}{2}-cf}{f}$	\mathbf{D} \mathbf{D} \mathbf{N} \mathbf{D}	sses.	1 Ma 1 Ma 1 Ma
3.Mode =? $x_k + h. \begin{cases} \frac{(f_{k-1} - f_{k-1} \end{cases}$ 4.In a data, if $l = 6$ 67.5 5.For the following Mark Frequency The sum of lower 20 6.While computing Evenly distributed Centred at the low 7.Median =? $l + \begin{cases} h \times \frac{\left(\frac{N}{2} - cf\right)}{f} \end{cases}$ 8.If the mode of the 15 9.The mode of a find Histogram.	$ \frac{\mathbf{f}_{k})}{\mathbf{f}_{k+1}} $ $ \mathbf{B} $	$f_{k} + h$. $\begin{cases} 70 \\ 15 \end{cases}$ The ending of the group sets. The elasses. $f_{k} + f_{k} + f_{$	elass and number of $\frac{\left(cf - \frac{N}{2}\right)}{f}$ and be determined as $\frac{\left(cf - \frac{N}{2}\right)}{f}$ and $\frac{N}{2}$ and N	then the mass of the state of	$a_k + h$. $\left\{ \frac{1}{(f_k)} \right\}$ dode is: $a_k + h$. $\left\{ \frac{1}{(f_k)} \right\}$ dode	uencies arclass mark the upper $\frac{N}{2}$ - cf }	D 190 D 190 D 190 D No D 19 D Free	sses.	1 Ma 1 Ma 1 Ma 1 Ma 1 Ma
23. Mode =? $x_k + h$. $\begin{cases} \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \end{cases}$ 24. In a data, if $l = 6$ 25. For the following Mark Frequency The sum of lowe 20 26. While computing Evenly distributed Centred at the low 27. Median =? $l + \begin{cases} h \times \frac{\left(\frac{N}{2} - cf\right)}{f} \end{cases}$ 28. If the mode of the low 15 29. The mode of a final Histogram. 30. If 35 is removed	$ \frac{f_{k})}{f_{k+1}} $ $ \frac{f_{k})}{f_{k+1}} $ $ B $	$f_{tk} + h$. $\begin{cases} \frac{1}{6} \\ \frac{1}{6} \end{cases}$ $\begin{cases} \frac{1}{6} \\ $	elass and number of $\frac{\left(cf - \frac{N}{2}\right)}{f}$ and be determined as $\frac{\left(cf - \frac{N}{2}\right)}{f}$ and $\frac{N}{2}$ and N	C 1 Then the man and the man	$a_k + h$. $\left\{\frac{1}{(f_k)}\right\}$ dode is: $a_k = \frac{1}{20}$ $a_k = \frac$	uencies arclass mark the upper $\frac{N}{2}$ - cf }	D 62 D 62 D 190 The classimits of the D No D 19 D Free creases by:	sses. classes. ne of these.	1 Ma 1 Ma 1 Ma 1 Ma
23. Mode =? A $x_k + h$. $\begin{cases} \frac{(f_{k-1} - f_{k-1})}{(2f_k - f_{k-1})} \end{cases}$ 24. In a data, if $l = 6$ A 67.5 25. For the following Mark Frequency	$ \frac{f_{k})}{f_{k+1}} $ $ \frac{f_{k})}{f_{k+1}} $ $ \frac{f_{k})}{f_{k+1}} $ $ \frac{g}{f_{k}} $ $ \frac{g}{f_{k+1}} $ $ \frac{g}{f_{k+1}} $ $ \frac{g}{f_{k}} $ $ \frac{g}{f_{k+1}} $ $ \frac{g}{f_{k}} $ $ \frac{g}{f_{k+1}} $ $ \frac{g}{f_{k}} $ $ \frac{g}{f_{k+1}} $ $\frac{g}{f_{k+1}} $ $\frac{g}{f$	$f_k + h$. $\begin{cases} 70 \\ 15 \end{cases}$ The endian of the group sets. The elasses. $f_k + f_k +$	elass and red data, where $\frac{\left(\text{cf}-\frac{N}{2}\right)}{f}$ and be determined as $\frac{1}{2}$, $$	Then the man and t	$a_k + h$. $\left\{\frac{1}{(f_k)}\right\}$ dode is: $a_k + h$. $\left\{1$	uencies arclass mark he upper lift $\frac{\frac{N}{2}-cf}{f}$	D 190 D 50 D 190 D 50 D 190 D 50 D 190 D 62	sses. classes. ne of these.	1 Ma 1 Ma 1 Ma 1 Ma 1 Ma

Frequenc	<u>y</u> 2		4	5	71	48	20			
		eletes who	o completed	I the race in 1	less then 1	4.6 seconds i	s:			
A 11			B 71			C 82		D 13	0	
	e mean o	f observat	tions $x_1, x_2,$	\dots , x_n is \bar{x} , t	hen the m	ean of $x_1 + a$	$x_{2} + a,, $	$x_n + a$ is		1 Mark
$\mathbf{A} \ \mathbf{a} \bar{\mathbf{x}}$			$\mathbf{B} \ \bar{\mathbf{x}} - \mathbf{a}$		($\mathbb{C} \ \bar{\mathbf{x}} + \mathbf{a}$		$\mathbf{D} = \frac{\bar{\mathbf{x}}}{\mathbf{a}}$		
Q33.Which	ch one of	the follow	wing is not a	measure of	central ten	idency?				1 Mark
A Arithm			B Media			C Mode	C-11		riance	1 M l .
						examination a			\neg	1 Mark
Mar Frod	k Juency	130-135	135-140	140-145	145-150 23	150-155	155-160	160-165		
							О]3		
The	cumulativ	ve frequer	ncy of the cl	lass interval	140-145 is	:				
A 52		2.2	B 48			C 50		D 40		425
	e mean of	ffrequenc		on is 8.1 and		$132+5\mathrm{k},\sum$	$\hat{f}_{ m i}=20,$ the			1 Mark
A 3		C 41 C4	B 4	1 !-	(C 5		D 6		1 M
	e mean of	the first	10 natural n	iumbers is-				-	_	1 Mark
A 5.5	a madian	of the det	B 5	6 x ± 2 x ±		C 6 34 is 27.5, t	hon v —	D 4.5		1 Mork
	e median	or the dat		0, x + 2, x +			nen x –	D 20		1 Mark
(R).N Asse	Mark the ertion: If	correct che the value	noice as:	d mean is 60	ent of asso	C 28 ertion (A) is fespectively, the	·		at of reason	1 Mark
(A). A Both a (A). B Both a (A). B Both a (A). C Assert	assertion assertion assertion tion (A) is	(A) and re (A) and re (A) and re s true but	eason (R) an	re true and re re true but re re true but re ris false.	eason (R) is ason (R) is ason (R) is	is the correct is the correct s not the corr s not the corr C Assertion (D Assertion (explanation ect explanatect explanatect	of assertion of assession of assessit reason (on ertion ertion R) is false.	
Q39.Asse mode Reas	ertion: If e is 25. son: Mod	for a certa	ain frequenc		n, l $=24.5$				hen the value of	1 Mark
(A). B Both a (A). C Assert	assertion tion (A) is	(A) and restrue but	eason (R) ar	re true but re	ason (R) is	is the correct s not the corr D Assertion (espectively, the	ect explanat (A) is false b	ion of asse	ertion (R) is true.	1 Mark
			ode + 2 mea eason (R) ar		eason (R)	is the correct	explanation	of assertio	on	
(A). A Both a (A).	assertion	(A) and re	eason (R) ar	re true and re	eason (R)	is the correct	explanation	of assertio	on	
	assertion	(A) and re	eason (R) ar	e true but re	ason (R) is	s not the corr	ect explanat	ion of asse	ertion	
	assertion	(A) and re	eason (R) ar	e true but re	ason (R) is	s not the corr	ect explanat	ion of asse	ertion	
	` /		reason (R)			C Assertion (`		
	` ′		t reason (R) e following	is true. frequency di		D Assertion (A) is false b	ut reason ((K) is true.	1 Mark

Class interval	3-6	6-9	9-12	12-15	15-18	18-21
Frequency	2	5	21	23	10	12

D Assertion (A) is false but reason (R) is true.

C Assertion (A) is true but reason (R) is false.

Reason: Median = (mode + 2 mean)

(A).

Q42. Assertion: If the value of mode and mean is 60 and 66 respectively, then the value of median is 64. 1 Mark

1 Mark

1 Mark

1 Mark

A Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion

B Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

B Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion

C Assertion (A) is true but reason (R) is false.

D Assertion (A) is false but reason (R) is true.

Q43.Assertion: Consider the following frequency distribution:

Class interval	0-4	4-8	8-12	12-16	16-20
Frequency	6	3	5	20	10

The median class is 12-16.

Reason: Let $n = \sum f_i$ Then, the class whose cumulative frequency is just lesser than $(\frac{n}{2})$ is the median class.

A Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C Assertion (A) is true but reason (R) is false.

D Assertion (A) is false but reason (R) is true.

Q44.Assertion: The arithmetic mean of the following frequency distribution is 25.

Class Interval	0-10	10-20	20-30	30-40	40-50
Frequency	5	18	15	16	6

Reason: Mean $(\bar{x}) = \frac{\sum f_i x_i}{\sum f_i}$ where $x_i = \frac{1}{2}$ (Lower limit+Upper limit) of the i^{th} class interval and f_i is its frequency.

A Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C Assertion (A) is true but reason (R) is false.

D Assertion (A) is false but reason (R) is true.

Q45.Assertion: Consider the following frequency distribution:

Class interval	10-15	15-20	20-25	25-30	30-35
Frequency	5	9	12	6	8

Reason: The class having maximum frequency is called the modal class.

A Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C Assertion (A) is true but reason (R) is false.

D Assertion (A) is false but reason (R) is true.