DA	Y	2-
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	-		
F			

BASIC TO INTERMEDIATE

D'Alathmetic mean for population & Sample.

Mean (Average)

Population (N)

x = (1,1, 2,2, 3,3,4,5,5,6)

 $\int_{i=1}^{\infty} \frac{1}{N} \int_{i=1}^{N} \frac{1}{N} \int_{i=1}^{\infty} \frac{1}{N} \int_{i$

= 1+1+2+2+3+3+4+5+5+6 = 32 = 3.2

Sample (n)

 $\overline{X} = \underbrace{\frac{\eta}{2}}_{0i=1} \times 1 - \underbrace{\frac{3\cdot 2}{n}}_{0i=1}$

A Central Tendency (Central Measure of Tendency)

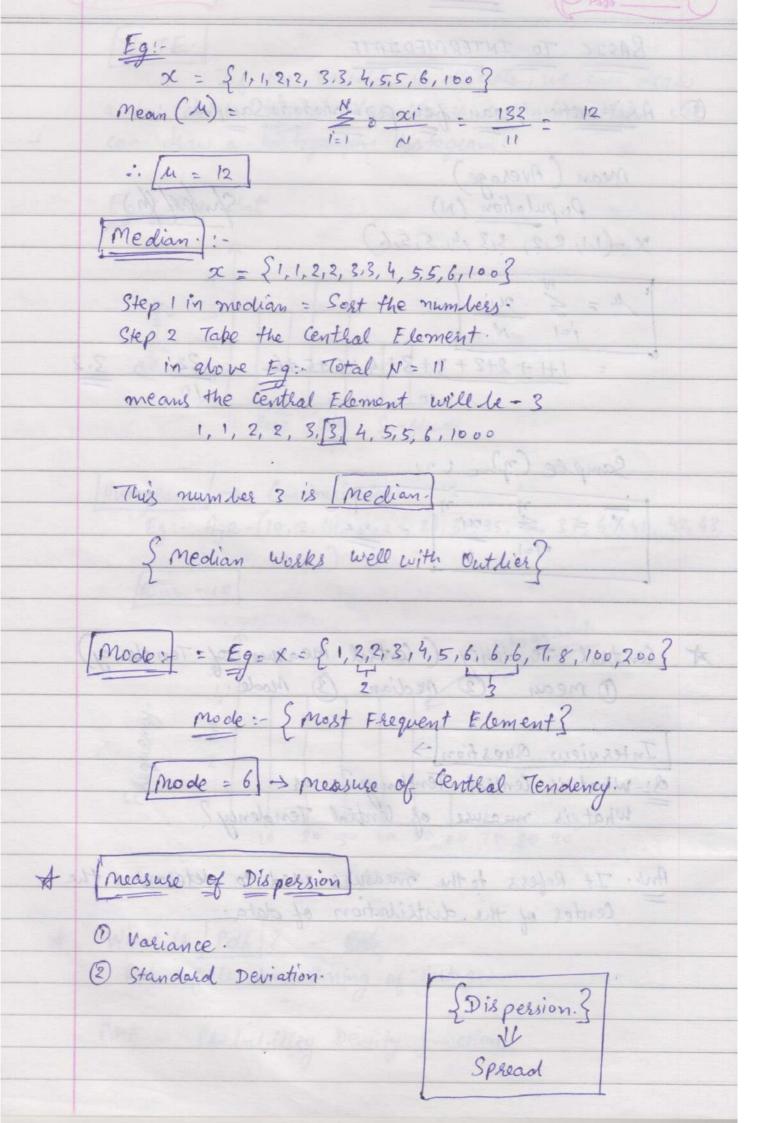
1 mean 2 median 3 Mode.

Interview Buestion >
S:-What is Central Tendency? or.
What is measure of Central Tendency?

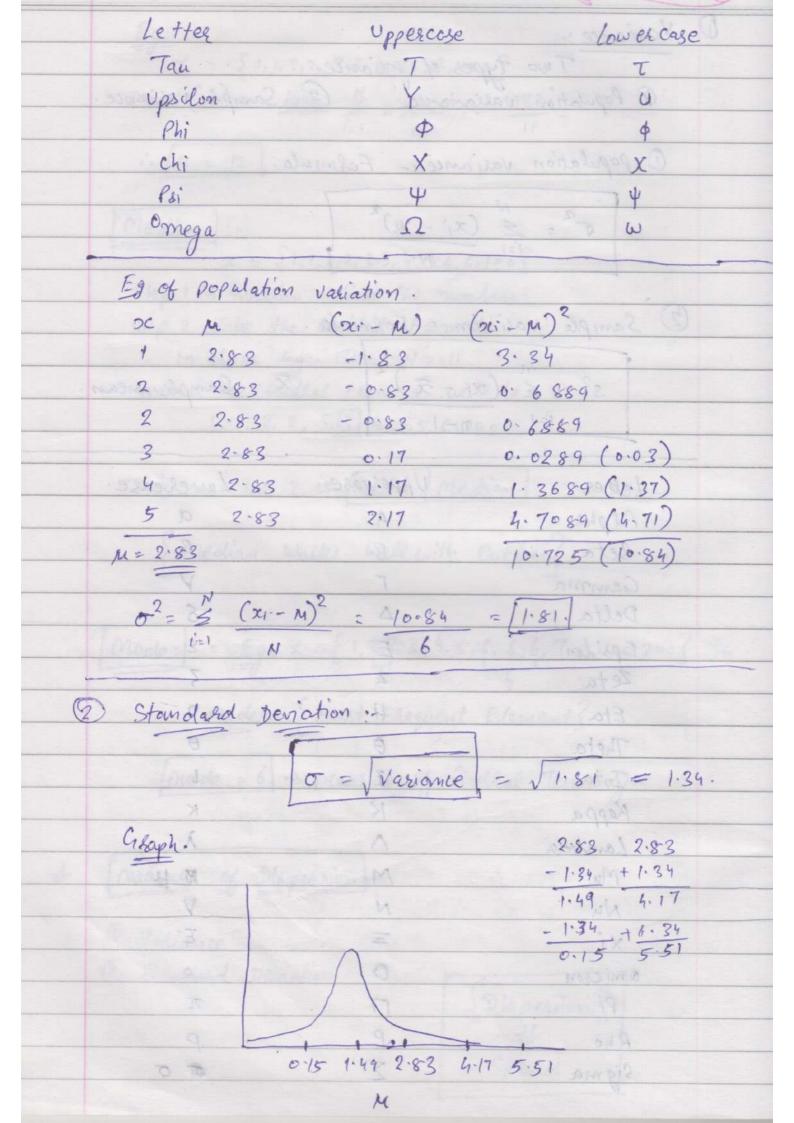
Ans. It Refers to the measure used to determine the center of the distribution of data.

Standard Deviation.

Pinoisisq is C



1 Variance	?- A	Bussedan		Letter	
T	Two To	spes of valid	ance.	ample valiance	
1 Popus	lation va	lionce	(2) Se	ample valiance	e.
		0		also a	
1 popul	ation va	riance: - t	Formula	e cle	
-177				25	
(a) o	2: 5	(xi - m)2		Ogwesa	
	121	(xi - m)2	the think	on colo	-
				Eg of popula	
(2) Samp	le Varia	ation = Folm	mula.	100 8100	
1	9.95 18	-Tistale de	1	2 - 2 - F	
s ²	= { (xi-元)~	50 :	= Sample mea	n.
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(Cook	0.000	51		0.0 0	
Letter	28.2	Upper	case =	Lower case.	
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0		35			



A	Percentiles And Buartiles
	This is the first step to final outliers.
	O File Smathle (30)
100	Per cen tage:
	Per cen tage:- Eg:- 1, 2, 3, 4, 5
	(E) VASO (E) CONTRACTOR (E) CONTRACTOR (E)
	Find the % of the numbers that are odd?
	% = x10. of Numbers that are odd x100
215	Total Numbers
	= 3 ×100 = 0.6 ×100 = 60%
	Total Numbers = 3 ×100 = 0.6 ×100 = 60%.
	and and
NO A 13	Percontile:
	Defination: - A percentile is a value below
	which a certain percentage of observation lie??
	TI MAKESONFIELD SE 16 TO CONTENT - 2. 2 TO TO PERSONAL TO
	Dotaset: - 2,2,3,4,5,5,5,6,7,8,8,8,8,8,9,9,9,00 11,11,12
[5	What is the percentile hanking of 10?
	Ego Hele x = 10
	. #
	Percentile Rank of 20 = # of values below x x 100
	Now For Mercuntilles 18 4 1 april 18
	Where n = 20 as compare to above example.
	Aprobate No. of soft
	x = 16 x 600 = 80%
	264
21.31	This is our 15 thand 1 oth number whice
	This means that the 80% of the entire distribution is
	loss then 10.
	Ge feet above data not the state of the

9 will be the date where Trapperoration them?

	Assignment MA DAMAN
	The same of the sa
	What is the percentile Ram King of 1819
	20 = 11
	Percentile Romking of x = # of value below x x 100
	St. St. St. St. St.
	= 17 × 160 : [857.]
	THE TO BE THE THEN LOS THAT DE CONT
	Est of Copyrighting destations
	Mower x has no tente experient by die ?
2	What value escists at percentile han 14ing of 251.?
	formula.
	Value = Per centile x (n+1)
	= 25 × 21 = 5.25 > Index position.
130	abel Jules existed 100 gets - when Is de es la value Luclo
	So According to our dataset
	2,2, 3, 4, 5, 5, 5, 6, 7, 8, 8, 8, 8, 8, 9, 9, 9, 10, 11, 12
21 111	Topot: - 83/31, 5/5 5/5 6/7 8/8/8/8/8/9/2/12/11/
	5.25 lie betwen these in owl value will be . [5]
	al = 25%.
1	Charles de la company de la co
0.01	I Percentile Romer of se = # of values latouse or
	Now For 15 per centile. 75 x21 = [15.75]
	takers in colo as compete to alore example.
	Acc. to our dataset
	2,2,3,4,5,5,5,6,7,8,8,8,8,8,9,9,10,11,11,12.
	This is our 15th and 16th number where 15.75 li
الغ	g_0 take mean of these. $M = \frac{9+9}{2} - \frac{18}{2} = \frac{19}{2}$
	M = 9+9 - 18 - 19 - 18
	2 2 -
	9 will be the value where 75 percentile lie.

A	Five Humber Summary
	= N = 8 - 1 = = 0 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	D Minimum.
	@ First Buartile (Bi)
	(3) Median.
	(4) Third Graffile (83)
	(5) Maximum.
	Higher Fence = BS+ 15 (ISK) (T
	(3) (3-1) + 37 =
	Removing the outliers.
	Suppose the dataset is
	{ 1, 2,2,2,3,3,4,5,5,5,6.6,6,6,6,7,8,8,9,27}
	- Standard Negmal Distribution
	First we have to define the {Lower Fence () Higher fence}
	M. P. W. W. P. S.
	The number that is outside the Lower Fence and
	Higher Fence is the outlier.
	Following with soil with
	Lower Fence = BI - 1.5 (IOR)
	Higher Fence = 83 + 1.5 (IBR)
	(3) Historian Park Box per stroken plat mails (8)
	where (IBR) = Interqualtile Range
	where (IBR) = Interqualtile Range IBR = B3-B1
30 War	where 03 = 75 /. (Percentile).
Mannen 5	where 03 = 75 % (Percentile). 81 = 25 % (Percentile).
1	
	For 251. = 25 x d(19+1) = 5 > Index position.
(1)	
27	So for above data set &1 (25%) = 3. Similarly &3 [75%] = 7
	Similarly 03 [75%] = 7 100 100 100 100 100 100 100

Now Interquartile Range (IBR) = 83-81 = 7-3 = 4	*
= 1-3 = 4	
what is not resemble the the of 112 morning of	
Lower Fence = B1 - 1.5 (IBR)	
= 3-1.5(4)	100
= 3-6 (20 + 3Nitrong bould (1)	
F Maginism in Ti	
Higher Fence = 83+1.5 (IBR)	
= 7 + (1.5)(4)	
Acrossing thethe EVES 6+ 7 =	
to the value society at severale and the of	15/2
So the Lower Fence (>> Higher Fence Range.	
So the Lower Fence (>> Higher Fence Range.	
The state of the s	
So in our dataset	di Tex
1, 2, 2, 2, 3, 3, 4, 5, 5, 5, 6, 6, 6, 6, 6, 7, 8, 8, 9, 2	
The runnier that is outside the identical and	
27 is the outlier because [27713]	
Now Five Humber Summary	[5]3
De Minimum = 1	
(2) Filest & nartile (B1) = 3	
3 Median = 5	
(3) Third Quartile (83) = 7	
5 maximum = 9	
the to out distant	
Box plot 3 4 5 (3) 4 55 134 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	outlier
Minimum 0, median 03 maximum.	Floment
	1
Vex 25 1/2 - 25 Ald All - 5 per Later positioner	1
1 1 1 1 1 1 3	
-2 0 2 4 6 8 10	27
Box plots are used to determine the outlier.	

A sample variance. $S^2 = \frac{\pi}{3} (\pi - \pi)^2$ where $\pi - 1 = \text{Basal lodgettion}$.

or Degree of freedom.