William and American State of the Party of t				
Anower	10	the	question	20-1

5						
	1-2	2.3	3.4	4.5	5.6	Total
Interval Frequercy (Height)	0	0	3	14	23	Enterent of the Windows Continue of the Continue of the State of the Continue
Mid value	1.5	2.5	3.5	4.5	5.5	an Baining and a supplied to the late of the late of the supplied of the s
fixi	Ø	- THE THE HALL AND THE SERVICE STREET STREET STREET	20.5	63	126.5	200
到(汉),克)		Q	6. 污	3.5	5 · 75	16
					•	•

$$\frac{7}{x} = \frac{3 \text{ fixi}}{n} = \frac{200}{40} = 5$$

$$\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} = \frac{2}{3}$$

Now,

$$\overline{x} + 26 = 5.00 + 2 \times (0.63) = 6.26$$

 $\overline{x} - 26 = 5.00 - 2 \times (0.63) = 3.79$

So, from my observation I told that 95% value one in between (\$\overline{x} \pm 26) this range.

So, it will follow normal distribution.

Answer to the question 20-2

Genden	Paritive	Negative	Suspected	Potal
Male	7/7.5	15/1.89	3 3.75	25
Female	5 4.5	77.12	3 2.25	15
Potof	12	19	6	40 (n)

: Gorden and covid-19 information and are independend

H, : Garden and Cavid-19 information are dependent.

Now,

$$x^{2} = 3 \le \frac{0^{2}i}{Eij} - n$$

$$= \frac{x^{2}}{7.5} + \frac{15^{2}}{11.88} + \frac{3^{2}}{3.75} + \frac{5^{2}}{4.5} + \frac{x^{2}}{7.12} + \frac{3^{2}}{2.25} - 40$$

$$= 4.31$$

$$=4.31$$

At 59. Level of significance Xed $\angle X^2$ tob

 $df = (r-1)(c-1) \Rightarrow (2-1)(3-1) = 2$ Hene, $x_{+ab}^2 = 5.99$

So, Null hypothesis is accepted. The Gender and Covid-It information are not dependent.

Answer to the greation no-3

Now, cornelation coefficient

3x = 1144

Zy = 1980

 $2x^2 = 42470$

Zy2 = 95735

329 = 62010

$$\gamma = \frac{32y}{\sqrt{(3x^2 - \frac{(3x^2)^2}{n})^2}} \frac{2x^2y}{\sqrt{(2y^2 - \frac{(2y)^2}{n})^2}}$$

$$= \frac{62010 - \frac{3144 \times 3980}{40}$$

$$= \frac{(424\% - \frac{(1144)^2}{40}) (105\% 35 - \frac{(1980)^2}{40})$$

$$= \frac{5.382}{86\% 35}$$

$$= 0.62$$
Test for the Significance.

$$H_0: \ell = 0$$

$$H_1: \ell \neq 0$$

$$+ \frac{\pi\sqrt{r-2}}{\sqrt{1-r^2}}$$

$$= \frac{0.62\sqrt{40-2}}{\sqrt{1-(0.62)^2}}$$

$$\therefore t = 4.8\%$$

$$df = n - 2 = 38$$

 $df = N - 38 = 38 - 28 = 18$

of 5%. Level of significance Acceptance region

-2.10 Lt 22.101

Null hypothesis is rejected correlation is significant.