|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Class Interval | *x* | Class Boundary | Frequency  | *fx* | *Cf*  |
| 10.1-19.0 | 14.55 | 9.6-19.5 | 4 | 58.20 | 4 |
| 19.1-29.0 | 24.05 | 18.6-29.5 | 9 | 216.45 | 13 |
| 29.1-39.0 | 34.05 | 28.6-39.5 | 7 | 236.45 | 20 |
| 39.1-49.0 | 44.05 | 38.6-49.5 | 9 | 398.45 | 29 |
| 49.1-59.0 | 54.05 | 48.6-59.5 | 8 | 432.40 | 37 |
| 59.1-69.0 | 64.05 | 58.6-69.5 | 6 | 384.30 | 43 |
| 69.1-79.0 | 74.05 | 68.6-79.5 | 3 | 22.15 | 46 |
| 79.1-89.0 | 84.05 | 78.6-89.5 | 1 | 84.05 | 47 |
| 89.1-99.0 | 94.05 | 88.6-99.5 | 2 | 188.1 | 49 |
| 99.1-109.0 | 104.05 | 98.6-109.5 | 1 | 104.05 | 50 |

Esien Eyo Oku

Geology

19/sci14/014

STA104 assignment

Mean= *Efx/Ep* =50 =2324.5

= 2324.5/50=46.49

*X=46.5*

Median= L1 + ((N/2 – F))/F*xed*)C

=39.1 +(25-29/9)9.9

=39.1+(-4.40

=34.7

1st Mode= 19.1+(5/5+1)9.9

19.1+8.217=27.317

2nd Mode=39.1+(1/1+1)9.9

39.1+4.95=44.05

Multiple Mode=27.317+44.05= 71.317/2

=35.68

Q3= 3N/4= 3\*50/4=37.5

D2= 2N/10= 2\*50/10=10

P25= 25N/100 =25\*50/100=12.5

2.

|  |  |  |  |
| --- | --- | --- | --- |
| WEEK OF EXP | NO OF REJECT (Y) | XY | X^2  |
| 7 | 26 | 182 | 49 |
| 9 | 20 | 180 | 81 |
| 6 | 28 | 168 | 36 |
| 14 | 16 | 224 | 196 |
| 18 | 23 | 414 | 324 |
| 12 | 18 | 216 | 144 |
| 10 | 24 | 240 | 100 |
| 4 | 26 | 104 | 16 |
| 2 | 28 | 76 | 4 |
| 11 | 22 | 242 | 121 |
| 1 | 32 | 32 | 1 |
| 8 | 25 | 200 | 64 |

102 298 2278 1134

Regression equation= nExy-Exy/nExy-e(x)^2

=12\*2278-102\*298/12\*1134-(102)^2

=27336-30396/13608-10404

-3060/3204 =-0.95