NAME: NWAIWU SYLVESTER CHUCKWUKA.U

REG NO: 19/ENG05/042

DEPARTMENT: MECHATRONICS

COURSE TITLE: LAB FOR INFERENCE 1

COURSE CODE: STA 132

LECTURERS: MR ADEJUWON, SAMUEL OLUWASEUN

ASSIGNMENT

For Group A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Class level | F | Mid point (x) | fx | Fx2 |
| 1-5 | 0 | 3 | 0 | 0 |
| 6-10 | 7 | 8 | 56 | 448 |
| 11-15 | 10 | 13 | 130 | 1690 |
| 16-20 | 2 | 18 | 36 | 648 |
| 21-25 | 1 | 23 | 23 | 529 |
| 26-30 | 5 | 28 | 140 | 3920 |
| 31-35 | 4 | 33 | 132 | 4356 |
| total | 29 |  | 517 | 115291 |

X=lower class limit + upper class limit 2

# Mean=£fx n

517 =17.83 appx. 29

## Standard deviation =

=

= 3788.36

S.D= √3788.36 =61.52.

## 2. Coefficient Of Variation = × 100%

= =3.449 =344.9

=345% appx.

For Group B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Class level | f | Mid point(x) | fx | Fx2 |
| 1-5 | 2 | 3 | 6 | 18 |
| 6-10 | 4 | 8 | 32 | 256 |
| 11-15 | 7 | 13 | 91 | 1183 |
| 16-20 | 20 | 18 | 360 | 6480 |
| 21-25 | 16 | 23 | 368 | 8464 |
| 26-30 | 10 | 28 | 280 | 7840 |
| 31-35 | 6 | 33 | 132 | 4356 |
| total | 63 |  | 1269 | 28597 |

# mean

= =20.14

## Standard Deviation

=

=

= 48.96

S.D = √48.96

= 6.99

## Coefficient Of Variation

=

= 0.347×100%

=34.7

= 35% appx.

3.the group with the less variable distribution therefore is group B with a coefficient of variation value of 35% compared with that of group A which have 345%