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Jurusan : Sistem Informasi  
Mata Kuliah : Applied Statistics

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Nilai ujian	frekuensi
31 - 40	2
41 - 50	3
51 - 60	5
61 - 70	14
71 - 80	24
81 - 90	20
91 - 100	12

Jumlah 80

a. Nilai Rata - rata / Mean

Interval	Nilai Tengah	Frekuensi	fX
31 - 40	35,5	2	71
41 - 50	45,5	3	136,5
51 - 60	55,5	5	277,5
61 - 70	65,5	14	917
71 - 80	75,5	24	1812
81 - 90	85,5	20	1710
91 - 100	95,5	12	1146

Jumlah 80 6070

$$\bar{x} = \frac{\sum fX}{\sum f} = \frac{6070}{80} = 75,875$$

b. Nilai Tengah / Median

Dik : Median berada pada data ke-40, yaitu interval 71 - 80

- $L_0$  : 70,5
- $c$  : 10
- $n$  : 80
- $F$  : 24
- $f$  : 24

$$\text{Med} = L_0 + c \left( \frac{n/2 - F}{f} \right)$$

$$= 70,5 + 10 \left( \frac{80/2 - 24}{24} \right) = 77,17$$

c. Nilai Modus

Dik : Data yang sering muncul pada interval 71 - 80

- $L_o = 70,5$
- $b_1 = 24 - 14 = 10$
- $b_2 = 24 - 10 = 14$
- $c = 10$

$$\text{Mod} = L_o + c \left( \frac{b_1}{b_1 + b_2} \right)$$

$$= 70,5 + 10 \left( \frac{10}{10 + 14} \right) = 77,64$$

d. Kuartil

$$Q_i = L_o + c \left( \frac{i \cdot n / 4 - F}{f} \right), i = 1, 2, 3$$

\* Kuartil 1

Interval 61 - 70

- $L_o = 60,5$
- $F = 10$
- $f = 14$
- $c = 10$
- $n = 80$

$$\text{Maka, } Q_1 = 60,5 + 10 \left( \frac{1 \cdot 80 / 4 - 10}{14} \right)$$

$$= 67,64$$

\* Kuartil 2

Interval 71 - 80

- $L_o = 70,5$
- $F = 24$
- $f = 24$
- $c = 10$
- $n = 80$

$$\text{Maka, } Q_2 = 70,5 + 10 \left( \frac{2 \cdot 80 / 4 - 24}{24} \right)$$

$$= 77,17$$

\* Kuartil 3

Interval 81 - 90

- $L_o = 80,5$
- $F = 48$
- $f = 20$
- $c = 10$
- $n = 80$

$$\text{Maka, } Q_3 = 80,5 + 10 \left( \frac{3 \cdot 80 / 4 - 48}{20} \right)$$

$$= 86,5$$

e. Desil

$$D_i = L_o + c \left( \frac{in / 10 - F}{f} \right), i = 1, 2, 3 \dots 9$$

\*  $D_5$

interval 71-80

-  $L_o = 70,5$

-  $F = 24$

-  $f = 24$

-  $c = 10$

-  $n = 80$

$$\text{Maka, } D_5 = 70,5 + 10 \left( \frac{5 \cdot 80 / 10 - 24}{24} \right)$$

$$= 77,17$$

\*  $D_9$

interval 91-100

-  $L_o = 90,5$

-  $F = 68$

-  $f = 12$

-  $c = 10$

-  $n = 80$

$$\text{Maka, } D_9 = 90,5 + 10 \left( \frac{9 \cdot 80 / 10 - 68}{12} \right)$$

$$= 93,83$$