

QUESTION 1

SOALAN 1

- a) Table 1(a) shows the marks obtained by 40 students in an examination.

Jadual 1(a) menunjukkan markah yang diperolehi oleh 40 orang pelajar dalam suatu peperiksaan.

Table 1(a) / Jadual 1(a)

62	54	38	33	80	66	56	60	68	52
57	71	85	47	50	71	52	76	49	69
48	68	55	49	79	41	61	65	75	81
64	58	66	59	52	43	65	48	41	56

- i. Construct a frequency distribution table with a class width (class size) of 10 marks with the first class being 30-39.

Bina sebuah jadual taburan kekerapan dengan menggunakan lebar kelas (saiz kelas) 10 dengan permulaan kelas 30-39.

[3 marks]

[3 markah]

- ii. Calculate the mean.

Kirakan min.

[5 marks]

[5 markah]

- iii. Calculate the standard deviation for the data.

Kirakan sisisian piawai bagi data tersebut.

[7 marks]

[7 markah]

Lowest data:

Highest data:

Number of class interval : $\frac{\text{highest-lowest}}{\text{size of class}}$

$$: \underline{\hspace{2cm}} - \underline{\hspace{2cm}}$$

:

$$\approx 6$$

CLASS INTERVALS	FREQUENCY f	X	fX	$ X - \bar{X} $	$(X - \bar{X})^2$	$\Sigma f(X - \bar{X})^2$
30 - 39						
40 - 49						
50 - 59						
60 - 69						
70 - 79						
80 - 89						
TOTAL			Σ			Σ

Mean $\bar{x} = \frac{\Sigma f x}{\Sigma f}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

Variance, $\sigma^2 = \frac{\Sigma f(X - \bar{X})^2}{\Sigma f}$

$$= \underline{\hspace{2cm}}$$

$$=$$

So Standard Deviation $\sigma = \sqrt{\text{Variance}}$

$$= \sqrt{\underline{\hspace{2cm}}}$$

$$= \underline{\hspace{2cm}}$$