

Penyelesaian Lengkap

PRAKTIS 10

Kertas 2

Bahagian C

$$1 \text{ (a)} \quad \frac{1.68}{1.40} \times 100 = x \qquad \frac{4.86}{y} \times 100 = 135 \qquad \frac{z}{1.60} \times 100 = 125$$

$$x = 120 \qquad y = 3.60 \qquad z = 2.00$$

(b)

Barangan/Goods	Indeks harga, I Price index, I	Pemberat, w Weightage, w	Iw
Beras/Rice	120	90	10 800
Minyak masak/Cooking oil	135	70	9 450
Garam/Salt	115	40	4 600
Gula/Sugar	140	50	7 000
Tepung/Flour	125	30	3 750
		280	35 600

$$\bar{I} = \frac{\sum I_i w_i}{\sum w_i}$$

$$= \frac{35\,600}{280}$$

$$= 127.14$$

$$(c) \quad \frac{Q_{2024}}{Q_{2018}} \times 100 = 127.14$$

$$\frac{Q_{2024}}{\text{RM}2\,400} \times 100 = 127.14$$

$$Q_{2024} = \frac{127.14 \times \text{RM}2\,400}{100}$$

$$= \text{RM}3\,051.36$$

$$2 \text{ (a)} \quad \frac{x}{6.00} \times 100 = 120$$

$$x = \frac{120 \times 6.00}{100}$$

$$= 7.20$$

$$\frac{7.50}{y} \times 100 = 150$$

$$y = \frac{7.50 \times 100}{150}$$

$$= 5.00$$

$$\frac{11.20}{8.00} \times 100 = z$$

$$z = 140$$

$$(b) \quad \frac{4.60}{4.00} \times 100 = 115$$

$$(c) \quad \bar{I} = \frac{\sum I_i w_i}{\sum w_i}$$

$$= \frac{125(80) + 120(130) + 150(90) + 140(60)}{360}$$

$$= \frac{47\,500}{360}$$

$$= 131.94$$

$$3 \text{ (a)} \text{ (i)} \quad I = \frac{Q_1}{Q_0} \times 100$$

$$125 = \frac{64.00}{Q_0} \times 100$$

$$Q_0 = \frac{64.00}{125} \times 100$$

$$Q_0 = \text{RM}51.20$$

$$(ii) \quad \frac{I_{2024/2021}}{I_{2023/2021}} \times 100 = I_{2024/2023}$$

$$\frac{I_{2024/2021}}{110} \times 100 = 124$$

$$I_{2024/2021} = \frac{110 \times 124}{100}$$

$$= 136.4$$

(b) (i)

I	w	Iw
124	30	3 720
k	35	$35k$
135	20	2 700
125	15	1 875
	100	$35k + 8\,295$

$$\bar{I} = \frac{\sum I_i w_i}{\sum w_i}$$

$$\frac{35k + 8\,295}{100} = 133$$

$$35k + 8\,295 = 13\,300$$

$$35k = 5\,005$$

$$k = 143$$

(b) (ii) $143 = \frac{560}{Q_0} \times 100$

$$Q_0 = \frac{560 \times 100}{143}$$

$$Q_0 = \text{RM}391.61$$

4 (a) $p = \frac{\text{RM}89.60}{\text{RM}80} \times 100$
 $= 112$

(b)

Barang Item	I	w	Iw
Kasut Shoes	120	3	360
Beg Bag	130	q	$130q$
Kemeja Shirt	112	$8 - q$	$896 - 112q$
Seluar Trousers	116	5	580
		16	$18q + 1\,836$

$$\bar{I} = \frac{\sum I_i w_i}{\sum w_i}$$

$$121.5 = \frac{18q + 1\,836}{16}$$

$$1\,944 = 18q + 1\,836$$

$$18q = 108$$

$$q = 6$$

(c) $121.5 = \frac{\text{RM}1\,822.50}{Q_{2021}} \times 100$

$$Q_{2021} = 100 \times \frac{\text{RM}1\,822.50}{121.5}$$

$$= \text{RM}1\,500$$

(d) Indeks gubahan pada tahun 2025 berasaskan tahun 2021

Composite index in the year 2025 based on the year 2021

$$= 121.5 \times \frac{100 + 18}{100}$$

$$= 121.5 \times \frac{118}{100}$$

$$= 143.37$$

5 (a) $I = \frac{Q_1}{Q_0} \times 100$

$$108 = \frac{113.40}{Q_0} \times 100$$

$$Q_0 = \frac{113.40}{108} \times 100$$

$$Q_0 = \text{RM}105$$

(b) (i) $h = 100 - 35 - 20 - 25 = 20$

$$\bar{I} = \frac{\sum I_i w_i}{\sum w_i}$$

$$= \frac{108(20) + 130(35) + 120(20) + 140(25)}{20 + 35 + 20 + 25}$$

$$= \frac{12\,610}{100}$$

$$= 126.10$$

(ii) $126.10 = \frac{P_{2022}}{300} \times 100$

$$P_{2022} = \frac{126.10 \times 300}{100}$$

$$= \text{RM}378.30$$

(c)

Komponen Component	Indeks harga Price index	Pemberat, w Weightage, w
J	$108 \times \frac{120}{100} = 129.6$	20
K	130	35
L	$120 \times \frac{115}{100} = 138$	20
M	$140 \times \frac{90}{100} = 126$	25

$$\bar{I} = \frac{\sum I_i w_i}{\sum w_i}$$

$$= \frac{129.6(20) + 130(35) + 138(20) + 126(25)}{20 + 35 + 20 + 25}$$

$$= \frac{13\,052}{100}$$

$$= 130.52$$

6 (a) (i) $I = \frac{Q_1}{Q_0} \times 100$

$$a = \frac{30.90}{30} \times 100$$

$$a = 103$$

(ii) $\bar{I} = \frac{\sum I_i w_i}{\sum w_i}$

$$107.8 = \frac{113(6) + 103(n+2) + 112n + 101(3)}{6 + n + 2 + n + 3}$$

$$107.8 = \frac{678 + 103n + 206 + 112n + 303}{11 + 2n}$$

$$107.8 = \frac{215n + 1\,187}{2n + 11}$$

$$215.6n + 1\,185.8 = 215n + 1\,187$$

$$0.6n = 1.2$$

$$n = 2$$

(b) (i) $\frac{Q_{2025}}{Q_{2017}} \times 100 = 204 \dots \textcircled{1}$

$$\frac{Q_{2025}}{Q_{2022}} \times 100 = 120 \dots \textcircled{2}$$

$$\textcircled{1} \div \textcircled{2}: \frac{Q_{2022}}{Q_{2017}} = \frac{204}{120}$$

$$\begin{aligned} I_{2022/2017} &= \frac{Q_{2022}}{Q_{2017}} \times 100 \\ &= \frac{204}{120} \times 100 \\ &= 170 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad \frac{P_{2022}}{P_{2017}} \times 100 &= 170 \\ \frac{\text{RM}2\,465}{P_{2017}} \times 100 &= 170 \\ P_{2017} &= \frac{\text{RM}2\,465}{170} \times 100 \\ &= \text{RM}1\,450 \end{aligned}$$