MODUL TOPIKAL
SOALAN PERCUBAAN SPM 2023

TOPIK TINGKATAN 4
BAB 10

NOMBOR INDEKS
(*INDEX NUMBER*)

SUMBER SOALAN:
SOALAN – SOALAN PERCUBAAN

TERENGGANU
NEGERI SEMBILAN
KELANTAN
SABAH
SBP
MELAKA
SELANGOR (MODUL PINTAS-SET 1)
PERAK

SKEMA JAWAPAN

DISUSUN OLEH:

PN. NOORUL HUDA BINTI MOHD HASHIM
(SMK TAMAN TASIK, TAIPING)

PN ZAINAB BINTI ABD RAHMAN
(SMK CONVENT, TAIPING)

SOALAN 1 : SOALAN PERCUBAAN SPM NEGERI TERENGGANU 2023 (KERTAS 2)

13	(a)	$\frac{P_{21}}{3.00}\times 100 = 140$	K1	10
		4.20	N1	
	(b)	$\frac{140(2p)+135(3)+120(1)+130(p)}{2p+3+1+p} = 134.5$	K1	
		$p = 2$	N1	
	(c)	$\frac{25}{P_{21}}\times 100 = 134.5$	K1	
		18.59	N1	
	(d)	$\bar{I}_{23/15} = 130\times\frac{125}{100}$	K1	
		$\bar{I}_{23/15} = 162.5$	N1	
		$\left[\frac{140[2^{*}(2)]+135(3)+120(1)+{}^{*}162.5^{*}(2)}{2^{*}(2)+3+1+{}^{*}2}\right]$	K1	
		141	N1	

SOALAN 2 : SOALAN PERCUBAAN SPM NEGERI SEMBILAN 2023 (KERTAS 2)

13(a)	$\frac{72.90}{54} \times 100$	N1
	135	K1
(b)	$\frac{98 \times m}{100} = 122.5$ atau setara	N1
	m=125	K1
(c)	$h + 20 + 38 + k = 100$ atau $\frac{95(h) + 135(20) + 122.5(38) + 100k}{100} = 114.40$	K1
	Ganti $h = 42 - k$ atau $k = 42 - h$ dan selesaikan	N1
	$k = 19$ dan $h = 23$	P1
(d)	82.94 dilihat	K1
	$\frac{114.40(100 - y)}{100} = 82.94$ atau setara	N1
	$y = 27.5$	10 markah

SOALAN 3 : SOALAN PERCUBAAN SPM NEGERI KELANTAN 2023 (KERTAS 2)

		MARKAH	PENUH
13(a) (i)(ii)	$\frac{20.00}{Q_{2022}}\times 100 = 137$ atau $\frac{y}{x}\times 100 = 125$ atau $\frac{y}{y-8}\times 100 = 125$ atau $\frac{x+8}{x}\times 100 = 125$	K1	
	Bahan A : $Q_{2022} = RM14.60$	N1	
	Bahan E : $Q_{2022} = RM32.00$	N1	
	$Q_{2023} = RM40.00$	N1	
13(b)	$\frac{137(1)+90(1)+(h-2)(1)+2h(1)+125(1)}{1+1+1+1+1} = 127$	K1	10
	$h = 95$	N1	
13(c)	$I_{\frac{2024}{2023}} = \frac{143}{100}\times\frac{100}{127}\times 100$ atau $\frac{85.00}{Q_{2022}}\times 100 = 127$	K1	
	$\frac{x}{85.00}\times 100 = 112.60$ atau $\frac{Q_{2024}}{66.93}\times 100 = 143$	K1	
	$RM95.71$	N1	

SOALAN 4 : SOALAN PERCUBAAN SPM NEGERI SABAH 2023 (KERTAS 2)

14	a) $x = \frac{9.00}{6.00} \times 100$ $160 = \frac{y}{3.00} \times 100$ $115 = \frac{8.20}{z} \times 100$ $x = 150$ $y = 4.80$ $z = 7.13$	N1 N1 N1	**10**
	b) $\bar{I} = \frac{114(300)+150(120)+160(80)+115(500)}{300+120+80+500}$ 122.5	K1 N1	
	c) Anggapkan pemberat = 100 **Nota:** Terima apa-apa nombor pemberat asalkan nombor yang sama $\bar{I} = \frac{114(100)+150(100)+160(100)+115(100)}{100+100+100+100}$ $\bar{I} = 134.50$ Indeks harga dengan pemberat yang sama lebih tinggi daripada dengan pemberat berbeza	K1 N1 N1	
	d) $120 = \frac{P_{2023}}{40.00} \times 100$ $P_{2023} = 48.00$	K1 N1	

SOALAN 5 : SOALAN PERCUBAAN SPM SBP 2023 (KERTAS 2)

12(a)	$x=\frac{6}{4.80}\times 100$ @ $109=\frac{3}{y}\times 100$ **K1** $x=125$ **N1** $y=2.75$ **N1**		3
(b)	$\frac{125(150)+109(150)+105(100)+120(m)}{150+150+100+m}$ **K1** $\frac{125(150)+109(150)+105(100)+120(m)}{150+150+100+m}=116$ **K1** $m=200$ **N1**		3
(c)	$\frac{116}{100}\times 116$ @ $\frac{Q_{22}}{11}\times 100=116$ **K1** $\frac{x}{11}\times 100=134.56$ @ $\frac{116\times 12.76}{100}$ **K1** 14.80 **N1** 14.80×1.25 18.50 **N1**		4

SOALAN 6 : SOALAN PERCUBAAN SPM MELAKA 2023 (KERTAS 2)

13 (a) i	(i) $\frac{7.60}{x} \times 100 = 140$ $x = \text{RM}5.43$	1
(a) ii	$\bar{I} = \frac{140(5)+110(3)+105(4)}{5+3+4}$ $= 120.83$	1 1
(b) i	$\bar{I}\ \frac{2017}{2013} = \frac{120.83 \times 120}{100}$ $= 145$	1 1
(b) ii	$\frac{x}{600} \times 100 = 145$ $x = RM870.00$	1 1
(c)	$x = \frac{110}{120} \times 100$ $= 91.67$ Penurunan harga sebanyak 8.33% *The decrease of the price 8.33%*	1 1 1

SOALAN 7 : SOALAN PERCUBAAN NEGERI SELANGOR SET 1 2023 (KERTAS 2)

14	*(a)*	(i)	$\frac{8.40}{P_{20}} \times 100 = 140$ @ $\frac{P_{22}}{4.50} \times 100 = 130$ $P_{20} = 6.00$	K1 N1	
		(ii)	$P_{22} = 5.85$	N1	
	(b)		Indeks gubahan $= 132$ $\frac{(112)(1)+(140)(4)+(k)(2)+(130)(3)}{1+4+2+3} = 132$ $k = 129$	K1 N1	
	(c)		$P_Q = 126$ @ $P_S = 136.5$ Indeks gubahan $\bar{I} = \frac{(112)(1)+(126)(4)+(129)(2)+(136.5)(3)}{1+4+2+3}$ 128.35	P1 K1 N1	
	(d)		$\frac{P_{23}}{20} \times 100 = 128.35$ 25.67	K1 N1	
					10

SOALAN 8 : SOALAN PERCUBAAN NEGERI PERAK 2023 (KERTAS 2)

15	(a)		$\frac{3.00}{2.50}\times 100$ atau $\frac{q}{1.60}\times 100 = 150$ p= 120 q= 2.40	1 1 1	
	(b)		$\frac{125\times 120}{100}$ 150	1 1	
	(c)	i	45+10+m+n=100 atau $\frac{120(45)+130m+150n+125(10)}{100}=130$ Gunakan kaedah penghapusan ATAU penggantian m=20	1 1 1	
		ii	$\frac{P_{20}+k}{P_{20}} \times 100 = 130$ atau $\frac{P_{22}}{P_{22}-k} \times 100 = 130$ $\frac{13}{3}k$	1 1	