KEMENTERIAN PENDIDIKAN

UJIAN AKHIR SESI AKADEMIK

Tingkatan 3 Sesi 2022/2023

Matematik

(50)

PANDUAN PENSKORAN

Soalan	Jawapan	Markah
	BAHAGIAN A	
1	**B**	1
2	**A**	1
3	**A**	1
4	**D**	1
5	**B**	1
6	**B**	1
7	**B**	1
8	**C**	1
9	**B**	1
10	**A**	1
11	**C**	1
12	**A**	1
13	**C**	1
14	**D**	1
15	**B**	1
16	**B**	1
17	**D**	1
18	**C**	1
19	**C**	1
20	**D**	1

Soalan	Jawapan	Markah
1(a)	**BAHAGIAN B** i. Kecerunan / *Gradient* - P1 ii. Pintasan - y / *y-axis* - P1 iii. Persamaan Garis Lurus / *Linear Equation* - P1	[3 *markah*]

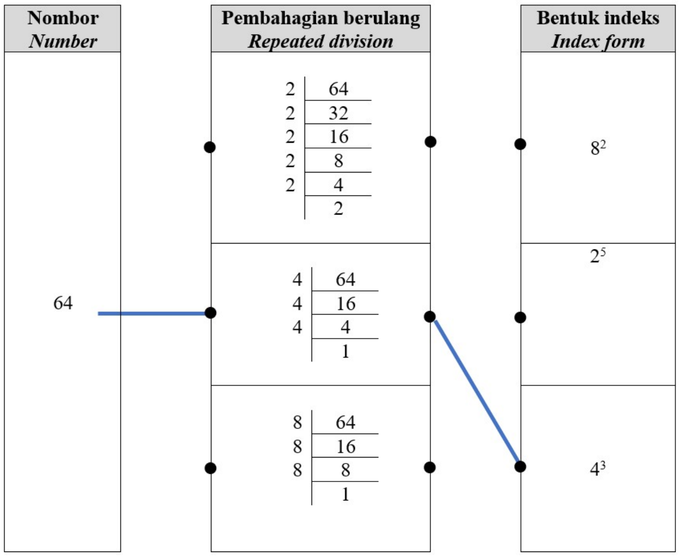
Soalan	Jawapan	Markah
1(b)	2 .... N1	[1 *markah*]

Soalan	Jawapan	Markah
2	**BAHAGIAN B** i) –3 P1 –2 N1 ii) 0.35 P1 2.55 N1	[4 *markah*]

Soalan	Jawapan	Markah
3(a)	**BAHAGIAN B** Ya/ *Yes* *P1*	[1 *markah*]

Soalan	Jawapan	Markah
3(b)	(see table below)	[3 *markah*]

$\angle x =$	35	55	70
$\angle y =$	35	55	70
$\angle z =$	35	55	70

<table>
<tr><th>Soalan</th><th>Jawapan</th><th>Markah</th></tr>
<tr><td>4(a)</td><td>BAHAGIAN B


<u>Nota :</u>
1. Garis suaian pertama betul - N1
2. Garis suaian kedua betul, 4^3 - P1
- Tidak terima mana-mana jawapan lain</td><td>[2 markah]</td></tr>
</table>

Soalan	Jawapan	Markah
4(b)	(i) BENAR (ii) PALSU	[2 *markah*]

<table>
<tr><th>Soalan</th><th>Jawapan</th><th>Markah</th></tr>
<tr><td>5</td><td>BAHAGIAN B
<table>
<tr><td>Pernyataan/Statement</td><td>Benar/True
Palsu/False</td></tr>
<tr><td>1</td><td>Benar/True</td></tr>
<tr><td>2</td><td>Palsu/False</td></tr>
<tr><td>3</td><td>Palsu/False</td></tr>
<tr><td>4</td><td>Benar/True</td></tr>
</table></td><td>[4 markah]</td></tr>
</table>

Soalan	Jawapan	Markah
	BAHAGIAN C	
1(a)	(i) $\begin{array}{r\|l} 8 & 512 \\ \hline \boxed{8} & 64 \\ \hline 8 & 8 \\ \hline & 1 \end{array}$ N1N1 (64), N1 (8) (ii) $512 = \boxed{8^3}$ N1	[4 *markah*]

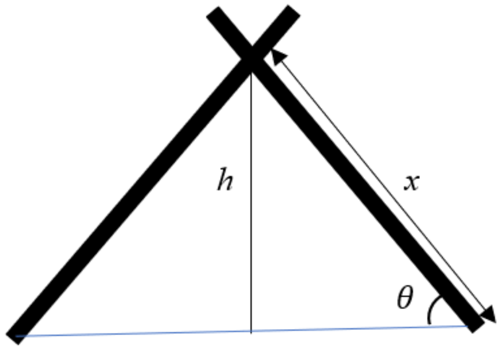
Soalan	Jawapan	Markah
1(b)	(i) $\left(\frac{1}{5}\right)^{11} = \left(\frac{1}{5}\right)^{2} \times \boxed{\left(\frac{1}{5}\right)} \times \left(\frac{1}{5}\right)^{3} \times \left(\frac{1}{5}\right)^{5}$ N1 (ii) $22r^2 \times \boxed{3}\, r^3 \times \frac{3}{11} r \times r^4 = 18\,\boxed{r^{10}}$ N1 N1	[3 *markah*]

Soalan	Jawapan	Markah
1(c)	(i) $1322 \times 10^4 = \boxed{1.322 \times 10^7}$ N1 (ii) $727{,}000 = \boxed{7.27 \times 10^5}$ N1 (iii) $0.0000901 = \boxed{9.01 \times 10^{-5}}$ N1	[3 *markah*]

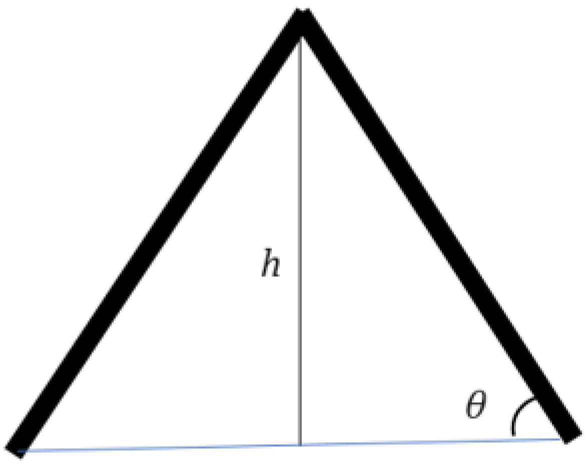
Soalan	Jawapan	Markah
	BAHAGIAN C	
2(a)	(i) saham P1 *shares* (ii) hartanah P1 *real estate* (iii) akaun simpanan P1 *savings account*	[3 *markah*]

Soalan	Jawapan	Markah
2(b)	(i) $\frac{12\ 000}{6\ 405}$ K1 1.87 N1 (ii) Roslan atau Pelabur B P1 *Roslan or Investor B* Mengamalkan strategi pemurataan yang boleh membantu beliau memiliki lebih banyak unit saham atau setara N1 *Practicing an averaging strategy that can help him own more stock units or equivalents* NOTA / *NOTES*: (1) Abaikan salutasi. *Ignore the salutation.* (2) Jika ejaan nama salah, beri N0. *If the name is spelt wrong, give N0.*	[4 *markah*]

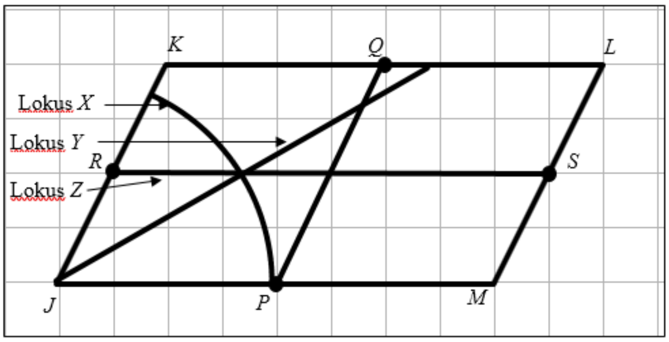
Soalan	Jawapan	Markah
2(c)	$\frac{45}{100}\times 700\ 000+700\ 000$ atau setara /*or equivalent* K1 $\frac{(1\ 015\ 000-3\ 100-4\ 800-7\ 500)+(1\ 850\times 12\times 7)-700\ 000}{700\ 000}\times 100$ K1 65 N1 NOTA: Jika K0K0N0, beri P1 jika 1 850 × 12 × 7 dilihat. *If* K0K0N0*, award P1 if* 1 850 × 12 × 7 *seen.*	[3 *markah*]

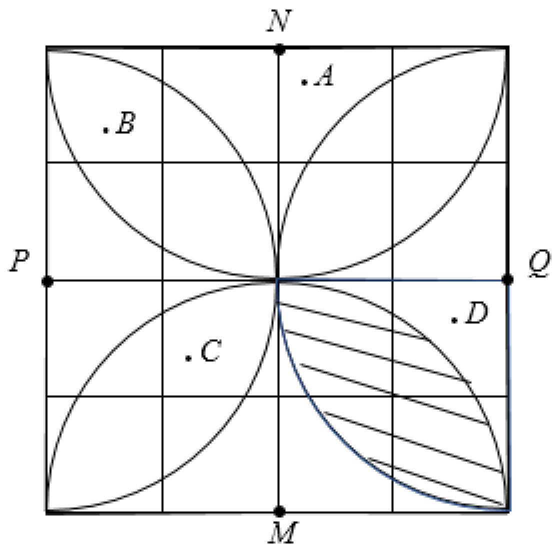
Soalan	Jawapan	Markah
3(a)	**BAHAGIAN C**  Tan = 1.73 [1 markah / marks] $x = \sqrt{2.6^2 + 1.5^2}$ [1 markah / marks] $= 3$ Kos = 0.5 [1 markah / marks] Sin = 0.87 [1 markah / marks]	[4 *markah*]

Soalan	Jawapan	Markah
3(b)	(i) 60^{o}. [1 markah / marks] (ii) Apabila nilai θ bertambah, nilai h juga akan bertambah. *As the value of θ increases, the value of h will also increase.* *[2 markah / marks]*	[3 *markah*]

Soalan	Jawapan	Markah
3(c)	 $h = \sqrt{3.2^2 - 1.5^2}$ [1 markah / marks] $= 2.83$ cm [1 markah / marks] (ii) 62^2. [1 markah / marks]	[3 *markah*]

Soalan	Jawapan	Markah
4(a)	**BAHAGIAN C** $x = 52$ K1 $y = 122 \div 2$ K1 $y = 61$ N1	[3 *markah*]

Soalan	Jawapan	Markah
4(b)	i. PQ P1 ii. JK dan ML P1 iii, iv dan v  iii. Lokus *X* dilukis dengan tepat P1 iv. Lokus *Y* dilukis dengan tepat P1 v. Lokus *Z* dilukis dengan tepat P1	[5 *markah*]

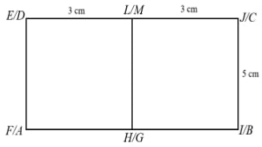
Soalan	Jawapan	Markah
4(c)	 i. kawasan berlorek betul P1 ii. D P1	[2 *markah*]

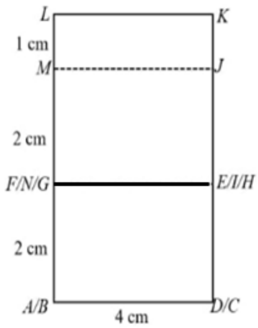
Soalan	Jawapan	Markah
	BAHAGIAN C	
5(a)	(i) $\frac{5}{1500}$ atau setara / or equivalent 1M 1: 300 1M (ii) 9 m 1M 135 m2 1M	[4 *markah*]

Soalan	Jawapan	Markah
5(b)	(i) $\frac{8}{-10}$ 1M $-\frac{4}{5}$ 1M (beri 2M apabila jawapan $-\frac{4}{5}$ sahaja) (ii) -10 1M	[3 *markah*]

Soalan	Jawapan	Markah
5(c)	(i) Koordinat Pasar : (8,8) 1M Koordinat Pejabat Pos: (4,0) 1M (ii) $y = 2x+12$ 1M	[3 *markah*]

Soalan	Jawapan	Markah
	BAHAGIAN C	
6(a)	$180° - 102° - 47°$ K1 $\frac{180° - 31° - 31°}{2}$ K1 $59°$ N1 Nota / Note: Dilihat / *Seen* $\angle DCO = 31°$ atau / *or* $\angle DOC = 118°$ P1	[3 *markah*]

Soalan	Jawapan	Markah
6(b)	 Bentuk sama bagi segi empat tepat *ABCD*, semua garis padu. K1 $EM = MJ = AG = GI$ K1 Garis padu LG K1 Ukuran betul ± 0.2 dan sudut pada bucu betul= 90° N1 Nota / Note: Abaikan label Lakaran K0K0N0	[4 *markah*]

Soalan	Jawapan	Markah
6(c)	 Bentuk sama bagi segi empat tepat *ADLK*, semua garis padu. K1 $AF = FM = JE = ED > LM = KJ$ K1 Garis sempang *MJ* K1 Ukuran betul ± 0.2 dan sudut pada bucu betul= 90° N1 Nota / Note: Abaikan label Lakaran K0K0N0	[3 *markah*]