

LEMBAGA PEPPERIKSAAN MALAYSIA

SIJIL PELAJARAN MALAYSIA 2006

LUKISAN KEJURUTERAAN
ENGINEERING DRAWING2 1/2 hours
(two and half hours)

Examiner Use					
Question	Full marks	Marks	Question	Full marks	Marks
1	5		5	8	
2	5		6	20	
3	7		7	20	
4	15		8	20	
Total marks				100	

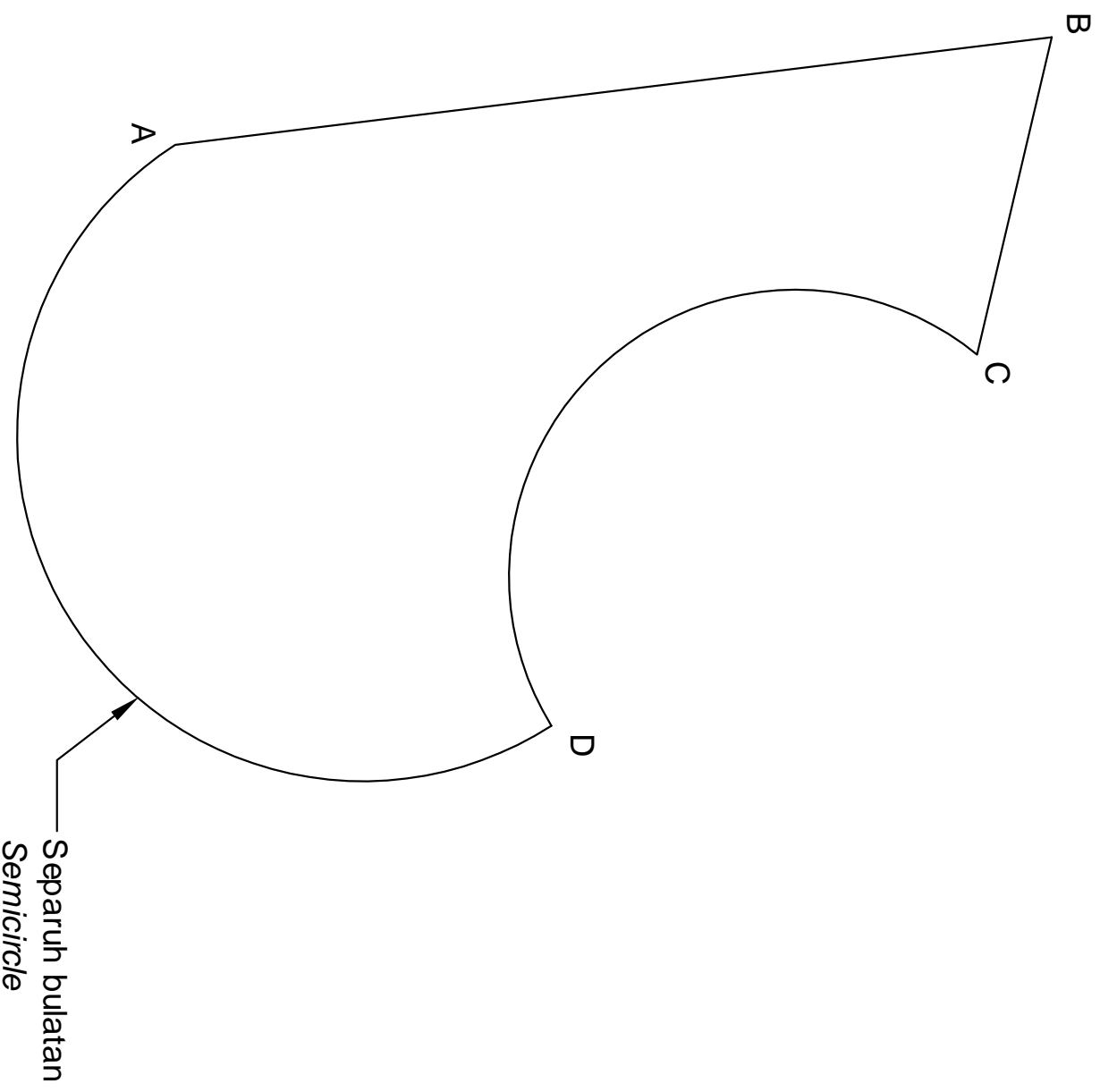
JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIBERTAHU
DO NOT OPEN THIS QUESTION PAPER UNTIL TO DO SO

- Jawab *semua* soalan.
- Anda dikehendaki menceraikan setiap helaian kertas soalan sebelum menjawab.
- Semua unjuran ortografik dilukis dalam unjuran sudut ketiga.
- Semua ukuran dalam milimeter (mm).
- Jawapan mesti dilukis dengan pensel pada ruang yang disediakan pada kertas soalan ini. Jawapan mesti dilukis mengikut skala saiz penuh kecuali dinyatakan bertlainan.
- Hanya kaedah geometri boleh digunakan dan semua garisan mesti dilukis dengan jelas.
- *Garisan binaan tidak perlu ditunjukkan* bagi *garisan selari, garisan serenjang* dan *garisan condong* yang dilukis dengan bantuan bantuan sesiku set dan sesiku T.
- Jawapan tidak perlu diimensikan.
- Markah akan diberi bagi kefahaman konsep, kaedah yang betul dan kejituan jawapan.
- Pastikan *nama* dan *tingkatan* anda ditulis pada setiap helaian kertas soalan.
- Pastikan anda mengikat kesemua helaian kertas soalan sebelum menyerahkannya kepada pengawas peperiksaan.

- Answer *all* questions.
- Please separate every sheet of the question paper before answering.
- All orthographic projections are drawn in third angle projection.
- All measurements are in millimeters (mm).
- All answers must be drawn in pencil in the space provided in the question paper. Answers must also be drawn in full scale unless specified otherwise.
- Only geometrical methods are to be use and all lines must be drawn clearly. **Construction lines need not to be shown for parallel lines, perpendicular lines and incline lines which are drawn with the help of a set-square and a T-square.**
- It is not necessary to indicate dimension in your answers.
- Marks are given for your understanding of the concept, the correct method and accurate answer..
- Please ensure that your **name** and **form** are written on every sheet of the question paper.
- Also, please ensure that all sheets of the question paper are tied together before you submit them to the invigilator.

Name : Form :

1. Lukiskan semula pencontoh yang ditunjukkan dalam Rajah 1 dengan menggunakan kaedah geometri. Kedudukan baru titik A dan D adalah seperti yang ditunjukkan. [5 markah]
2. Redraw the template shown in Figure 1 using geometrical techniques. The new positions of point A and point D are as shown. [5 marks]



RAJAH 1
FIGURE 1

+
D

+
A

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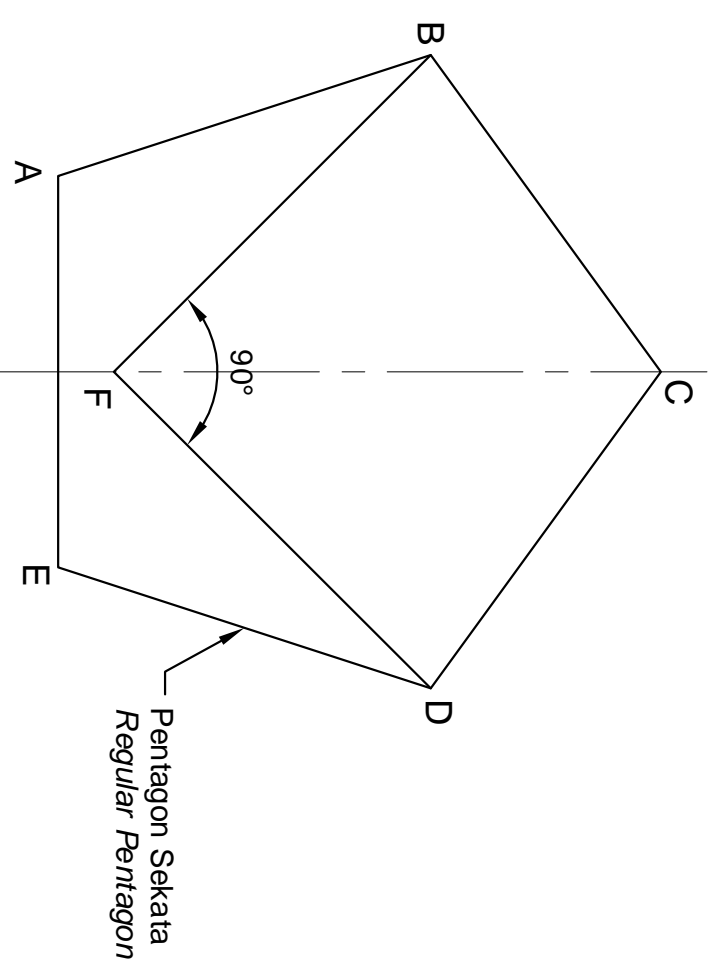
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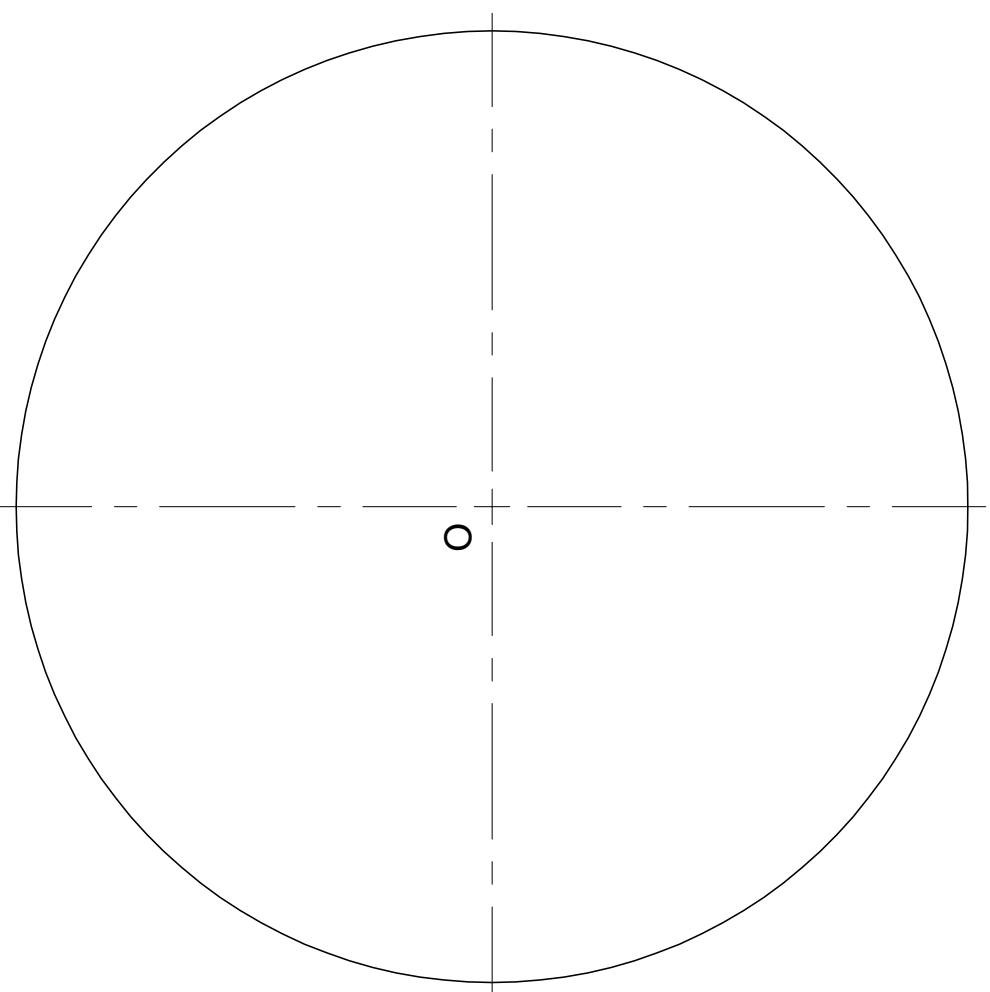
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SJIL PELAJARAN MALAYSIA 2006

2. Rajah 2 menunjukkan satu pencontoh ABCDEF. ABCDE ialah pentagon sekata. Lukiskan pencontoh itu dalam bulatan yang diberi. [5 markah]
2. Figure 2 shows a template ABCDEF. ABCDE is a regular pentagon. Draw the template in the given circle. [5 marks]



RAJAH 2
FIGURE 2



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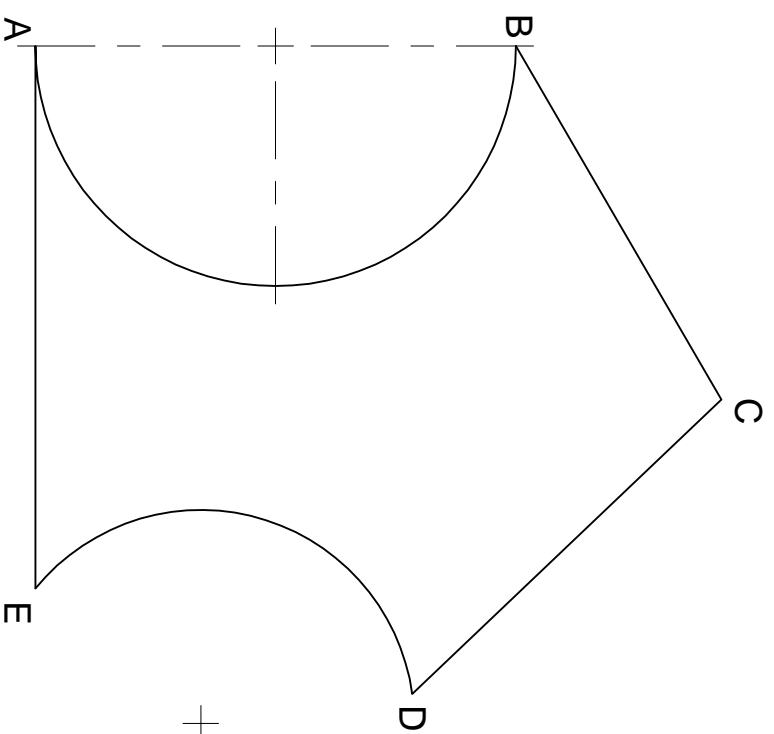
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3. Rajah 3 menunjukkan pencontoh ABCDE.
Besarkan pencontoh itu mengikut nisbah luas 5 : 3.
[7 markah]
3. Figure 3 shows a template ABCDE.
Enlarge the template in the area ratio 5 : 3.
[5 marks]



RAJAH 3
FIGURE 3

NAME :

FORM :

DATE :

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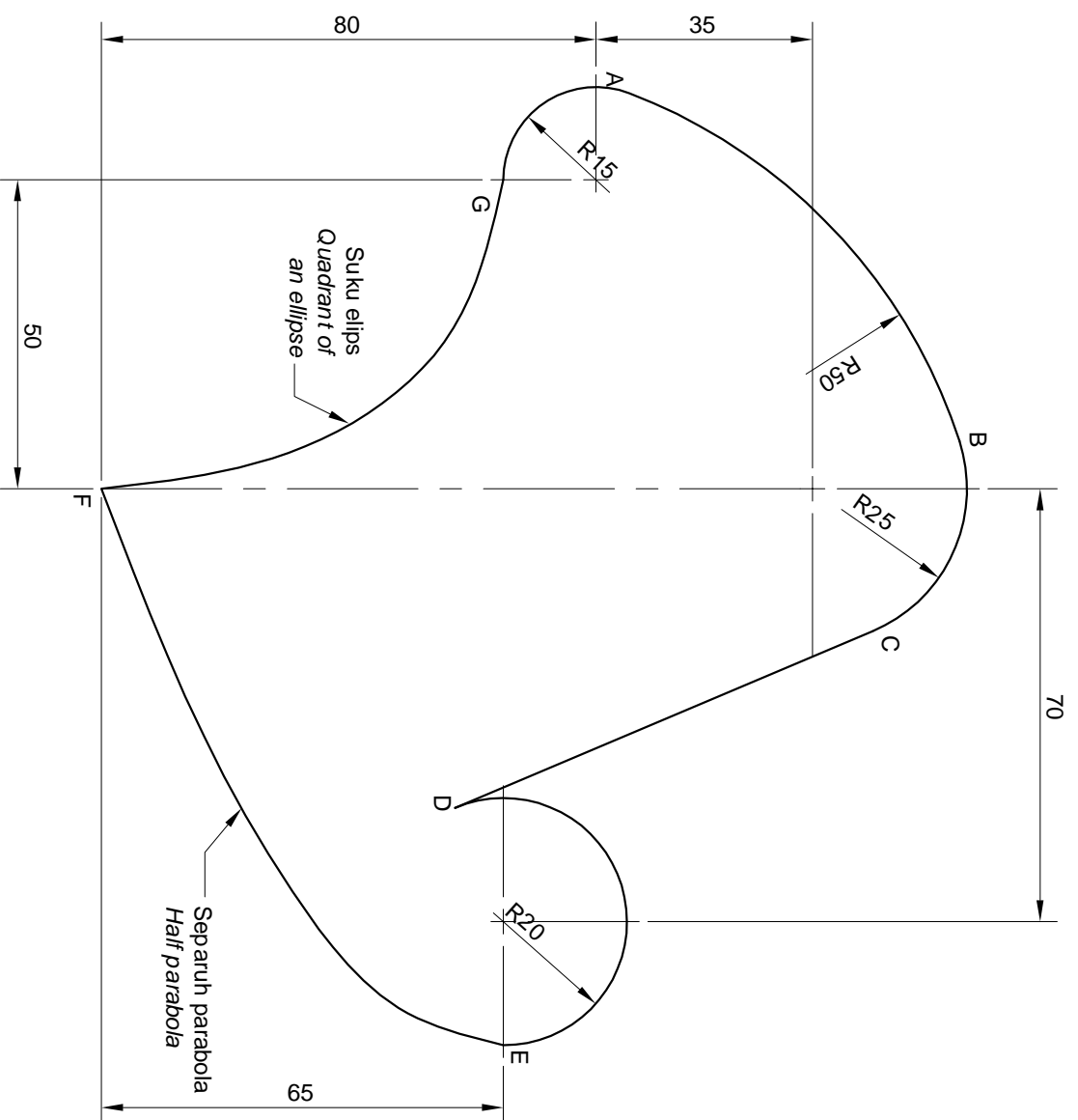
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4. Rajah 4 menunjukkan pencontoh ABCDEFG.
 A, B, C, D, E dan G adalah titik tangen. CD adalah garisan tangen.
 E ialah mercu bagi separuh parabola EF.
 Lukiskan pencontoh itu mengikut skala saiz penuh.

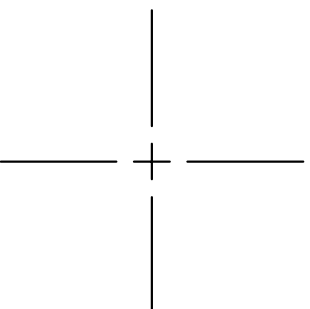
[15 markah]

4. Figure 4 shows a template ABCDEFG.
 A, B, C, D, E and G are tangent points. CD is a tangent line.
 E is a vertex for the half parabola EF.
 Draw the template in full size.

[20 marks]



RAJAH 4
 FIGURE 4



NAME :

FORM :

DATE :

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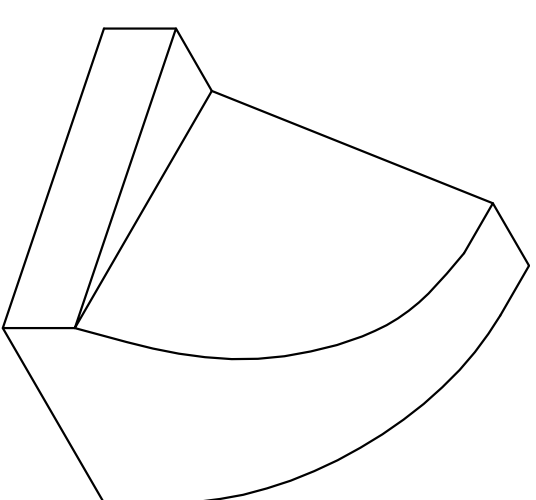
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5. Rajah 5 menunjukkan dua pandangan bagi objek A.
Lukis pandangan atas bagi objek itu.
Tunjukkan garisan unjuran.

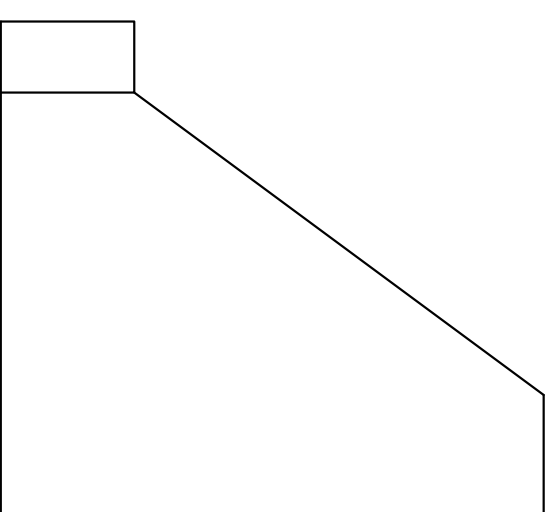
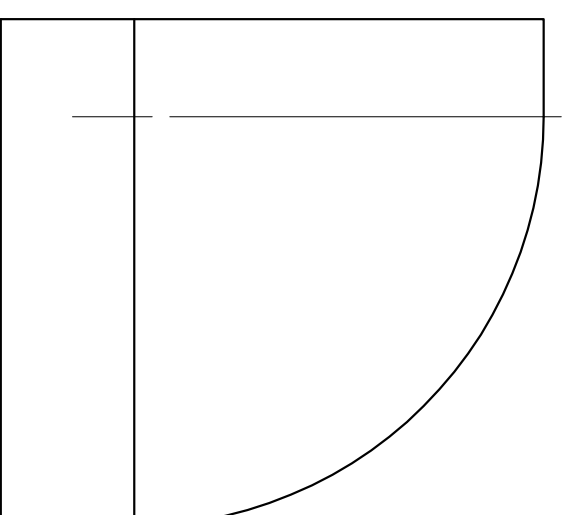
[8 markah]

5. Figure 5 shows two views of object A.
Draw the top view of the given object.
Show the projection lines.

[8 marks]



OBJEK A
OBJECT A



RAJAH 5
FIGURE 5

NAME :

FORM :

DATE :

3759/1 ENGINEERING DRAWING

SJIL PELAJARAN MALAYSIA 2006

6. Rajah 6 menunjukkan dua pandangan bagi satu bongkah.
Lukis saiz penuh pandangan oblik kavalier bagi bongkah itu.
Saiz petak grid ialah 10 mm x 10 mm.
Pilih orientasi supaya dapat menunjukkan butiran terperinci.
Butiran terlindung tidak perlu ditunjukkan.

[20 markah]

6. Figure 6 shows two view of a block.

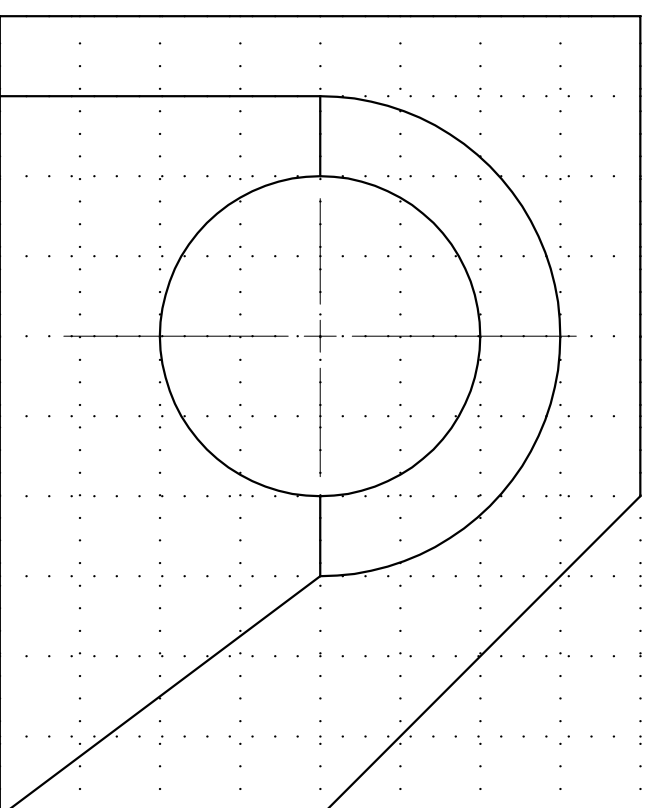
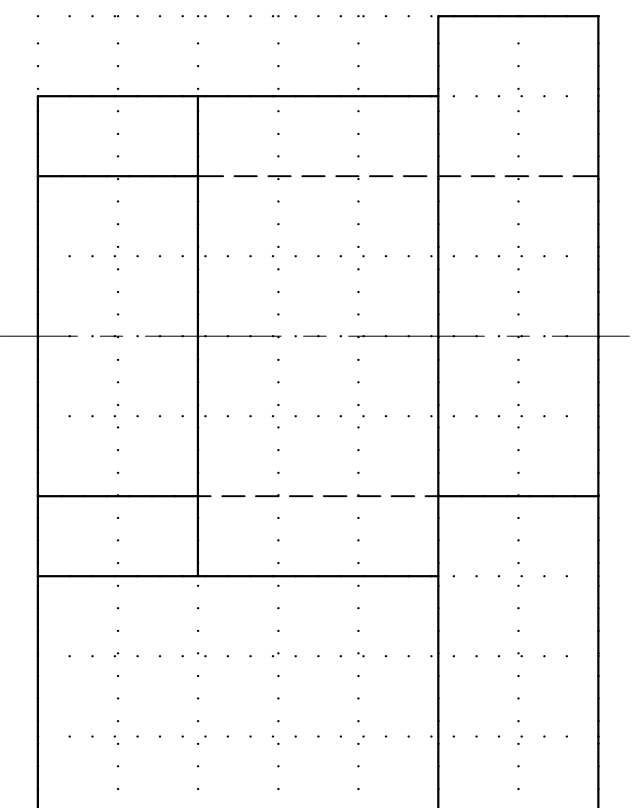
Draw a full size oblique cavalier view of the block.

The size of the grid is 10 mm x 10 mm.

Choose the orientation which will reveal the most detail.

Hidden details need not be shown.

[20 marks]



NAME :

FORM :

DATE :

3759/1 ENGINEERING DRAWING

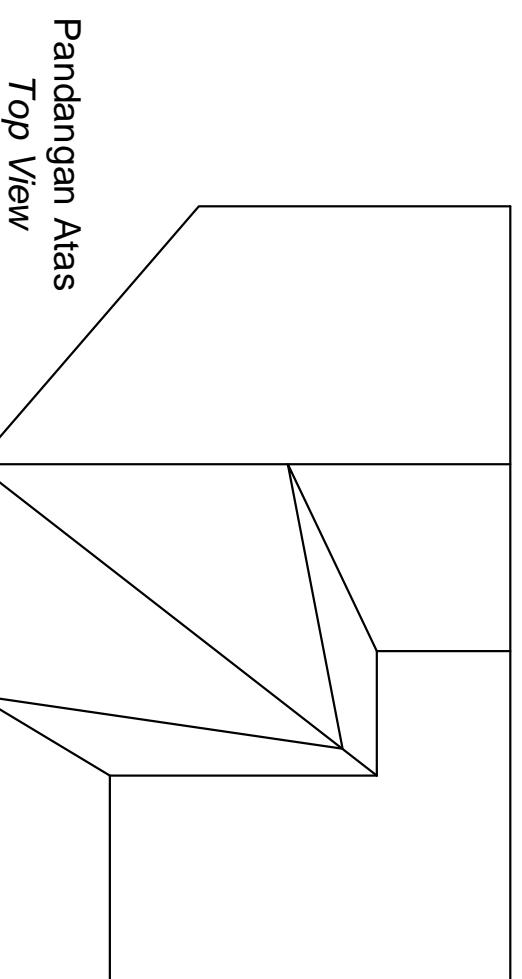
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7. Rajah 7 menunjukkan pandangan atas dan pandangan hadapan bagi objek B. Lukiskan pandangan perspektif satu titik bagi objek itu. Kedudukan satah gambar (SG), garis ufuk (GU), garis bumi (GB), titik stesen (TS) serta orientasi pandangan atas telah diberi. Butiran terlindung tidak perlu ditunjukkan.

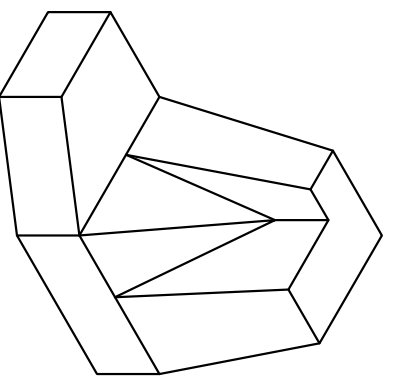
[20 markah]

7. Figure 7 shows the top view and the front view of object B. Draw a one-point perspective view of the object. The picture plane (PP), horizon line (HL), ground line (GL), station point (SP) and orientation of the top view are given. Hidden details need not be shown.

[20 marks]

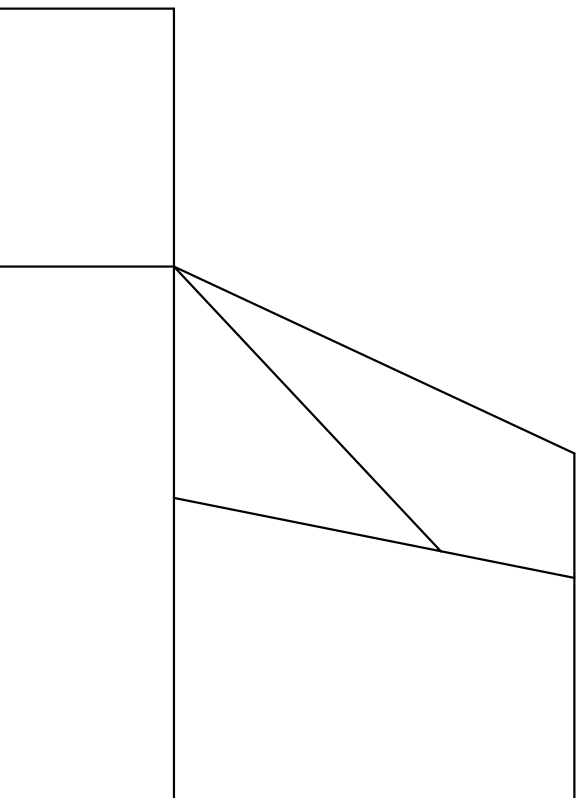


SG
PP



OBJEK B
OBJECT B

GU
HL



Pandangan Hadapan
Front View

TS
SP

GB
GL

NAME :

FORM :

DATE :

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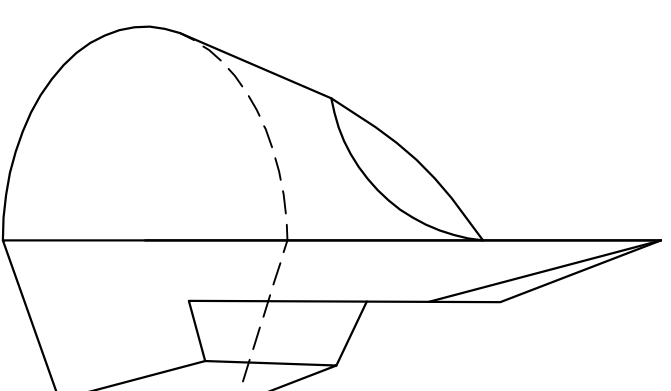
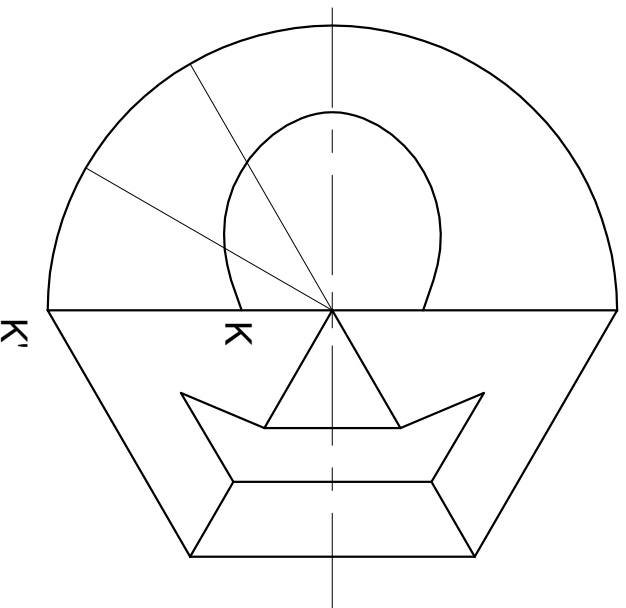
SIJIL PELAJARAN MALAYSIA 2006

8. Rajah 8 menunjukkan dua pandangan bagi objek C.
Objek C merupakan gabungan separuh piramid heksagon sekata dan separuh kon terpenggal.
Lukis pengorakan penuh bagi objek itu.
Kelim adalah pada kedudukan K-K'.

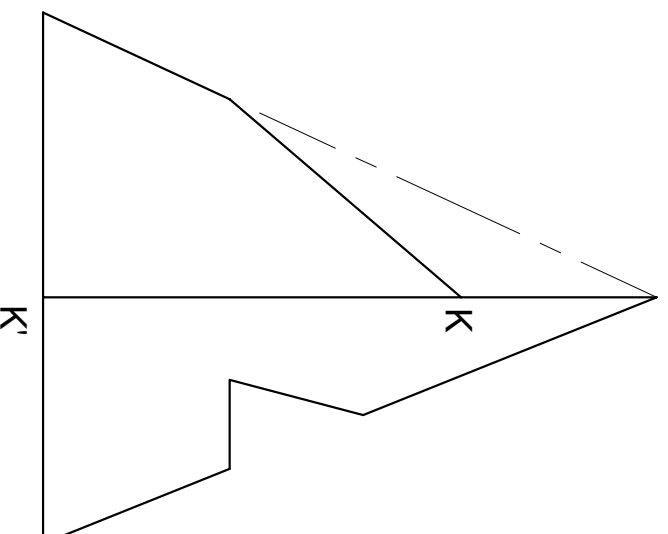
[20 markah]

8. Figure 8 shows two views of object C.
Object C is a combination of half of a regular hexagonal pyramid and half of a truncated cone.
Draw the full development of the object.
The seam is at K-K' position.

[20 marks]



OBJEK C
OBJECT C



NAME :

FORM :

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3759/1 ENGINEERING DRAWING

SIJIL PELAJARAN MALAYSIA 2006