

STAPLE HERE

FOR OFFICIAL USE

Centre No.	Subject No.	Level	Paper No.	Group No.	Marker's No.
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[C033/SQP173]

Advanced Higher Time: 3 hours NATIONAL QUALIFICATIONS  
 Graphic Communication  
 Specimen Question Paper

Marks Grid

Question	Marks
1	
2	
3	
4	
5	
6	
7	
Total Marks	

**Fill in these boxes and read what is printed below.**

Full name of centre Town

Forename(s) Surname

Date of birth Scottish candidate number Number of seat

Day Month Year

- 1 Answer all questions.
- 2 Read each question carefully before you answer.
- 3 Written answers may be in **ink** or **pencil**.
- 4 Drawings and sketches **must be in pencil**.
- 5 Sketches need only be in line form—do not spend time rendering.
- 6 Dimensions are given in millimetres or as stated.
- 7 Orthographic drawings are in third angle projection.
- 8 **At the end of the examination**
  - check that your name is on every sheet;
  - put the sheets in correct numerical order;
  - place this sheet on top of the others;
  - join all sheets together by **stapling** at the top left-hand corner;
  - before leaving the examination room, you must give these sheets to the invigilator (if you do not you may lose all the marks for this paper).

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## Section A

*Marks*

1. Describe **four** ways in which organisations can present a consistent and distinctive corporate image through **type**. (8)

2. The use and application of colour within the printing industry can be very important. Describe the following printing terms:

*Marks*

- (a) Pantone colour; 1

- (b) Spot colour; 1

- (c) Two colour; 1

3. Explain, with the aid of sketches, what is meant by the following Boolean operations, *Union* and *Subtraction*, as applied to 3D Solid Modelling. (3)

- (a) *Union* 2

- (b) *Subtraction* 2

*Space for sketches if required.*

(4)

Study “**Nursery Times**”, the Hands Free Nursery newsletter opposite.

Marks

(a) State **four** aspects of the newsletter that qualify it for the category of “newsletter” (apart from the obvious use of the term newsletter on the front cover).

4

(i)

(ii)

(iii)

(iv)

(b) Describe the visual aspects of the front cover that suggest this is an official publication of Hands Free Nursery.

2

(c) Describe the steps the designers have taken on the front cover to make the document easy to use.

3

(9)



# Nursery Times

The Community Nursery Newsletter

Number 12

September 2000

## Contents:

Read in this issue about new services for our younger children.

Find out about the book and toy loan service - extended now to all children using the nursery.

See also the extended list of information leaflets on a wide range of parenting topics.



The  
Hands Free  
Nursery  
Dysart

**Current Issues** 2  
**New Hygiene Rules**  
**Library Loan Scheme**

**Focus on Child** 4  
**Development**  
**Starting School**  
**You are what you eat**  
**Immunise - yes or no**

**Around the Primary** 6  
**and Secondary**  
**Schools**

**Pitfour**  
**Newliston**  
**Dunearn**  
**Martin High**  
**Viewforth High**

**Who's Who in the** 8  
**Nursery**

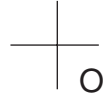
**Introducing** 10  
**computer skills**

**New Books for Sale** 11

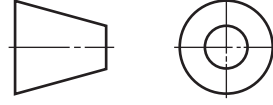
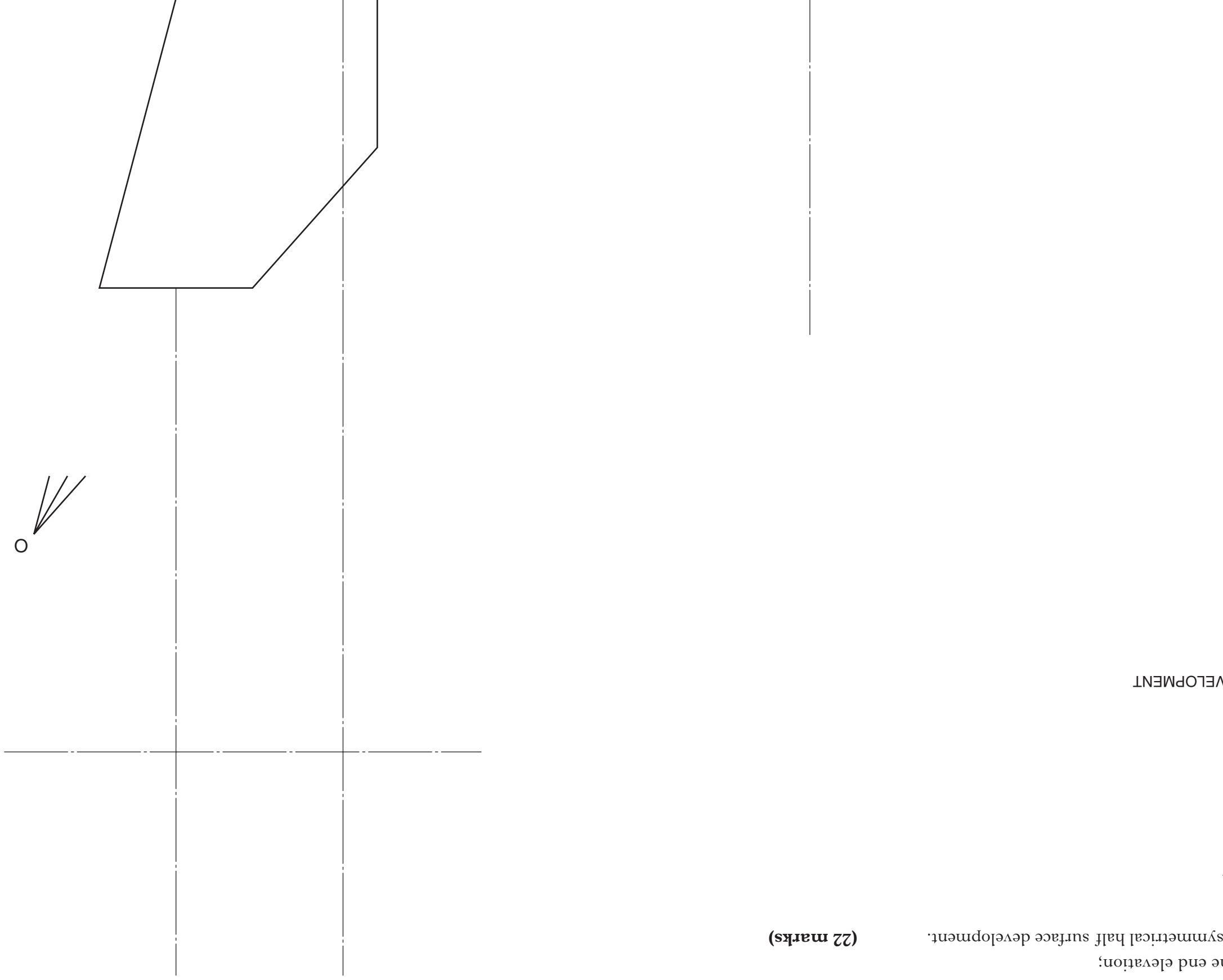
A toy ship's funnel is in the form of a partial oblique cone, the elevation of which is given below.

Draw, to the given scale:

- (a) the plan;
  - (b) the end elevation;
  - (c) a symmetrical half surface development.
- (22 marks)**

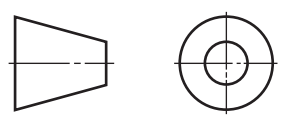


SURFACE DEVELOPMENT

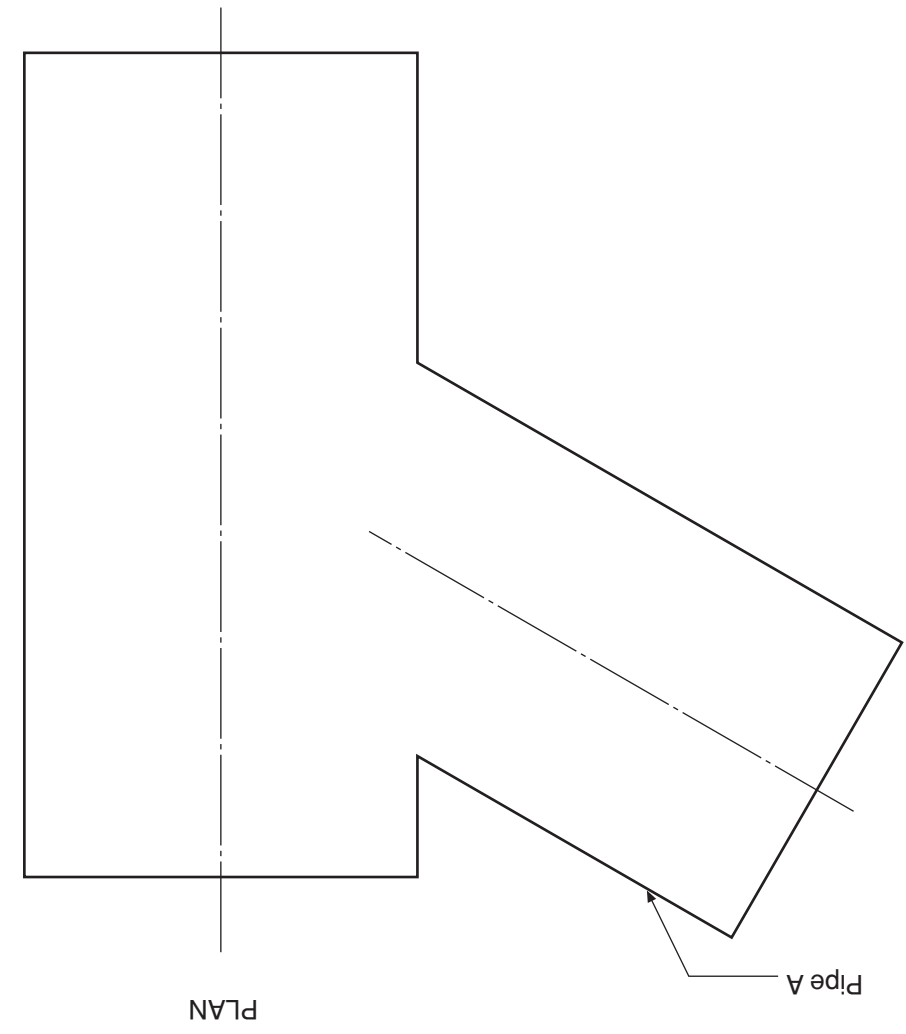


**Section B**

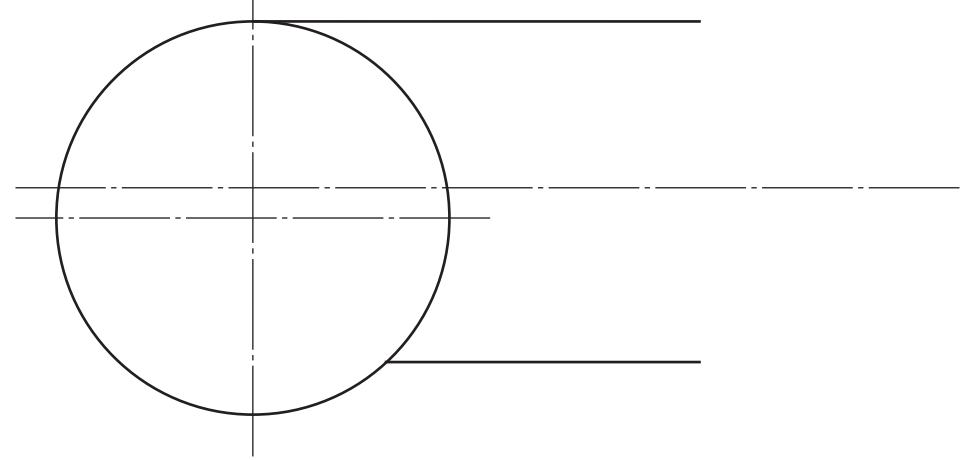
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	<i>c</i>
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	<i>f</i>
	<i>g</i>
	<i>h</i>
	<i>i</i>
	<i>j</i>
	<i>k</i>
	<i>l</i>
	<i>m</i>
	<i>n</i>



ELEVATION



PLAN



- Draw, in the positions indicated:
- (a) the completed plan;
  - (b) the completed elevation, showing all the curves of interpenetration;
  - (c) the surface development of pipe A.

(16 marks)

SURFACE DEVELOPMENT



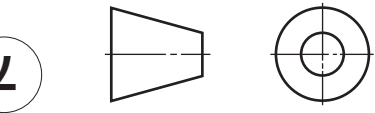
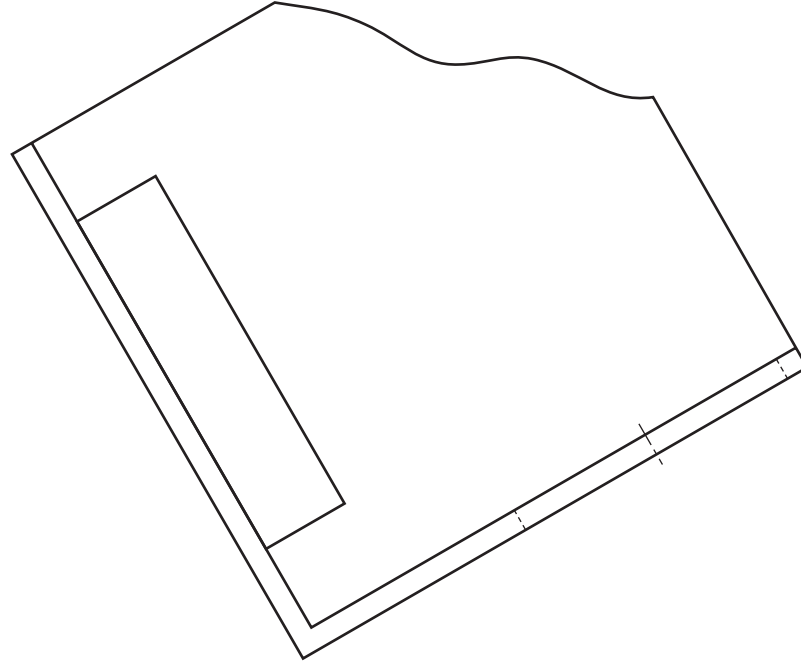
The arrangement of two interpenetrating cylinders is shown below.

	<i>n</i>
	<i>m</i>
	<i>l</i>
	<i>k</i>
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	<i>i</i>
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	<i>g</i>
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	<i>e</i>
	<i>d</i>
	<i>c</i>
	<i>b</i>
	<i>a</i>

Details of a dressing room showing a wardrobe and an archway through to the bedroom can be seen in the three views below. The ground line GL, eye level EL, picture plane PP and the spectator point SP are also given.  
 Draw a measured 2-point internal perspective view of the dressing room.  
 Show the thickness of walls.  
 Do not show hidden detail.

(18 marks)

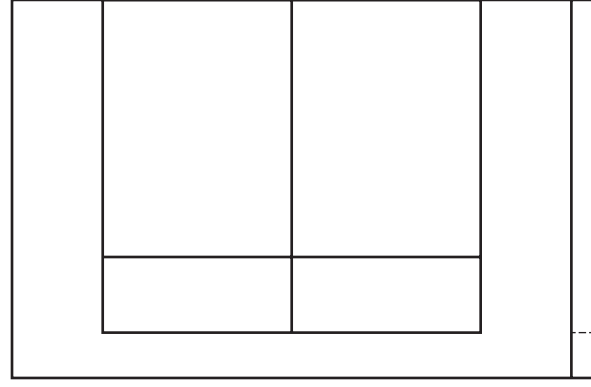
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	<i>m</i>
	<i>n</i>



EL \_\_\_\_\_

GL \_\_\_\_\_

PP \_\_\_\_\_

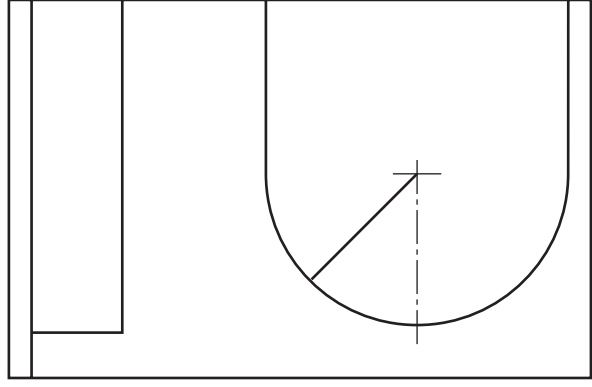


ELEVATION

Candidate's Name \_\_\_\_\_

[END OF QUESTION PAPER]

[CO33/SQP173] 7



END ELEVATION

Date \_\_\_\_\_

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[C033/SQP173]

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Advanced Higher  
Graphic Communication  
Specimen Marking Instructions

NATIONAL  
QUALIFICATIONS

## SECTION A

Marks

1. Describe **four** ways in which organisations can present a consistent and distinctive corporate image through **type**. (8)

It is important for an organisation to make itself known to the general public in order to build a range of customers. In order to achieve this, however, the organisation has to create and maintain a distinctive and consistent corporate image.

Any company is perceived according to the impression it makes as a group and perhaps the most important aspect of a corporate image is the use of a company logo. Multi national companies such as *Coca-Cola*, *McDonald's* and *Virgin* are recognised throughout the world because of their distinctive logos. In addition, it is an attempt to suggest there is a professional, authoritative and unified operation working behind the scenes.

Type can be used in a variety of ways to achieve a successful and consistent design and the extent to which colour is used can be important. For example, the *Channel 5* logo contains five very bright colours which suggests this is a lively company aiming at the young and trendy audience. This is in stark contrast to the phone banking company, First Direct. In this instance, a black and white theme is used to convey the idea of a serious yet simple to use organisation.

Maintaining a house style on all the company's products gives a coherence to all the printed matter that is produced and gives a common style to brochures, newsletters and so on. Thus, a standard house style implies consistency.

Typefaces—The sort of font an organisation adopts in its documentation can say a lot about the image of the company. For example, if documents are produced using the Times New Roman font, this suggests that the company is very serious and professional. On the other hand, if the Brushwood Script font is used, this implies that the company may be more down to earth and friendlier. This may, however, convey an image of unprofessionalism and consequently turn customers away.

An organisation may even wish to adopt a variety of fonts (ie separate fonts for different areas of text). Whatever the case, a corporation must be consistent in its use of typefaces in order to gain and maintain the trust of its customers. Standardisation is very important in the production of company documents as it represents the nature of the whole organisation.

Use of type effects—Type variations within a document can make certain aspects, particularly main points, stand out. If the main points in each document are represented in the same way, this indicates consistency and cohesion. For example, the main points of a document may be highlighted by italics. Alternatively, they could be underlined, or bold, or in upper case. It may be that headings and sub-headings are underlined, in bold type, or in upper case. The main function of type effects is to help the reader to locate the important facts from the document, thus making it more user friendly. This indicates the company cares for its clients and wants to save them time and effort. This maintains the customers faith in the company and persuades them to use the company again. Type effects, therefore, can help organisations to present and maintain a distinctive and consistent corporate image.

1. *(continued)*

It should also be pointed out that companies produce many written documents. These include contracts, letters, newsletters, brochures, receipts, magazines, business cards, posters, invoices and so on. It is essential that each of these products display the same image and the use of colour is perhaps more important in the development of posters and stationery items.

It should also be pointed out that companies can also present their corporate image in ways that are not written documents, for example, promotional items such as T-shirts, pens and baseball caps. Nevertheless, to be effective these items must present a constant and distinctive map corporate image.

It can be concluded, therefore, that type can play a significant part in presenting a consistent and distinctive corporate image. Whether it be a written document, a form of packaging or an advertising campaign, an organisation should maintain the same house style throughout. This lets the public become familiar with associating a specific style to a specific company and this is achieved through the use of type.

***Any four items from above Identified and Described in detail 4 @ 2.***

2. *The use and application of colour within the printing industry can be very important.*

*Describe the following printing terms:*

- |                             |  |   |
|-----------------------------|--|---|
| (a) <i>Pantone colour</i> — | Brand name registered colour system used by printers to identify specific colours and to match the colours exactly to the computer.  | 1 |
| (b) <i>Spot Colour</i> —    | Term used to describe colours which do not necessarily relate to a colour matching system or colours which are additional to the full colour process, such as silver, gold or fluorescent colours. | 1 |
| (c) <i>Two colour</i> —     | The process of only using two colours and tints of two colours in the print process.   | 1 |

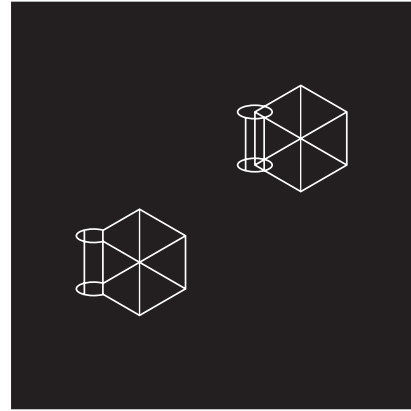
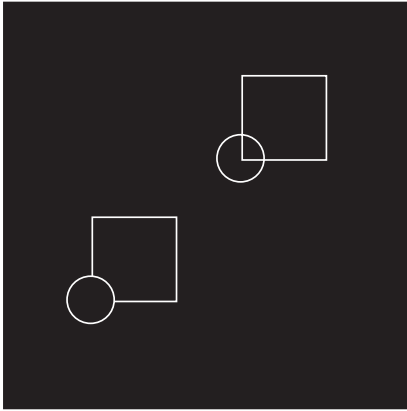
**(3)**

**1 mark for each**

3. Explain, with the aid of sketches, what is meant by the following Boolean operations, **Union** and **Subtraction**, as applied to 3D Solid Modelling.

(a) Union creates a composite solid by addition.

A composite solid is the result of combining the total volume of two or more existing solids.

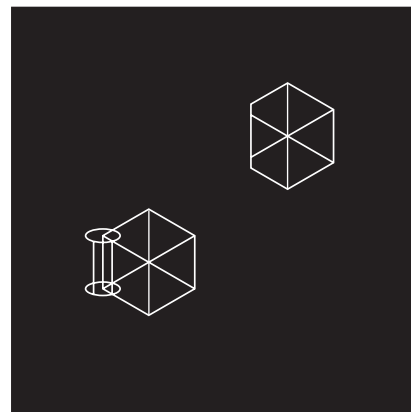
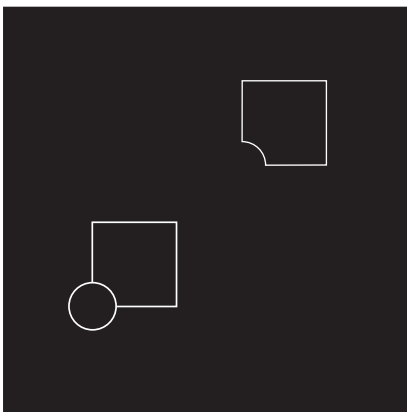


**1 mark for explanation, 1 mark for related sketch**

2

(b) Subtraction creates a composite solid by subtraction of elements.

A composite solid is the result of subtracting the total volume of two or more existing solids.



**1 mark for explanation, 1 mark for related sketch**

2  
(4)

4. Study “*Nursery Times*”, the Hands Free Nursery newsletter.

- (a) State **four** aspects of the newsletter that qualify it for the category of “newsletter” (apart from the obvious use of the term newsletter on the front cover).

Date. Contents. The title sounds like a newsletter title. Issue Number. It uses columns—particular layout. Current information.

**Four from list, 1 mark for each**

**4**

- (b) Describe the visual aspects of the front cover that suggests this is an official publication of Hands Free Nursery.

The Hands Free Nursery Logo. The bright colours used on the front-page border. Multi-colour hand prints. Type of text. The style used.

**Two from list, 1 mark for each**

**2**

- (c) Describe the steps the designers have taken on the front cover to make the document easy to use.

Contents. Information black and white. Bold, italicised large headings. Text is well spaced out. Good use of white space. Choice of fonts easy to read.

**Three from list, 1 mark for each**

**3**

**(9)**

## SECTION B

*Marks*

5. *A toy ship's funnel is in the form of a partial oblique cone, the elevation of which is given below.*

*Draw, to the given scale:*

- (a) *the plan;*
- (b) *the end elevation;*
- (c) *a symmetrical half surface developement.*

### Plan

(a)	Circle		$\frac{1}{2}$	
(b)	Part circles solid	3 @	$\frac{1}{2}$	$1\frac{1}{2}$
(c)	Part circle hidden	2 @	$\frac{1}{2}$	1
(d)	Sloping lines	2 @	$\frac{1}{2}$	1
				<b>4</b>

### Elevation

(e)	Construction of True Lengths (any correct method acceptable)		3	<b>3</b>
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### End Elevation

(f)	Construction of generators		1	
(g)	Sloping lines	2 @	$\frac{1}{2}$	1
(h)	Horizontal lines	2 @	$\frac{1}{2}$	1
(i)	Cut Surface Construction			3
(j)	Smooth Curve			1
				<b>7</b>

### Surface Development

(k)	True length for top Cut Surface + Smooth Curve		$2\frac{1}{2}$	
(l)	True length for top bottom + Smooth Curve			$1\frac{1}{2}$
(m)	True length of bottom Cut Surface + Smooth Curve	3 @	1	3
(n)	Location of point (n)			1
				<b>8</b>
				<b>(22)</b>

6. The arrangement of two interpenetrating cylinders is shown below.

Draw, in the positions indicated:

- (a) the completed plan;
- (b) the completed elevation, showing all the curves of interpenetration;
- (c) the surface development of pipe A.

**Plan**

(a) Construction work on Elevation (Semi circle and divisions marked)	1	
(b) Projection of points onto plan	1	
(c) Smooth Ellipse Curve	1	<b>3</b>

**Elevation**

(d) Projection of points from Pipe A	1	
(e) Points on Curve of Intersection 3-4 = $\frac{1}{2}$ 5-7 = 1   8-10 = $1\frac{1}{2}$ 11-12 = 2	2	
(f) Smooth Curve 0- $\frac{1}{2}$ -1	1	
(g) Interpolation Points	1	
(h) Smooth hidden detail curve 0- $\frac{1}{2}$ -1	1	<b>6</b>

**Development**

(i) Layout of development length $\pm$ 5 mm	1	
(j) Points of development	3	
(k) Interpolated points	1	
(l) Smooth Curve	2	<b>7</b>
		<b>(16)</b>

7. Details of a dressing room showing a wardrobe and an archway through to the bedroom can be seen in the three views below.

The ground line *GL*, eye level *EL*, picture plane *PP* and the spectator point *SP* are also given.

Draw a measured 2-point internal perspective view of the dressing room.

Show the thickness of walls.

**Do not show hidden detail.**

Location of V1 & V2	1	
Location of VP1 & VP2	1	
Height lines constructed	2	4

### **Archway**

Construction work of plan (Semi-circle and divisions)	2	
Projection of points onto plan	1	
Points on perspective Curve (maximum 14 points)	3	
Archway Wall	1	7

### **Wardrobe**

Projection of points	1	
Vertical lines	4	2
Perspective lines	5	2½
Wardrobe wall	1	1½
		7
		<b>(18)</b>

5

A toy ship's funnel is in the form of a partial oblique cone, the elevation of which is given below.

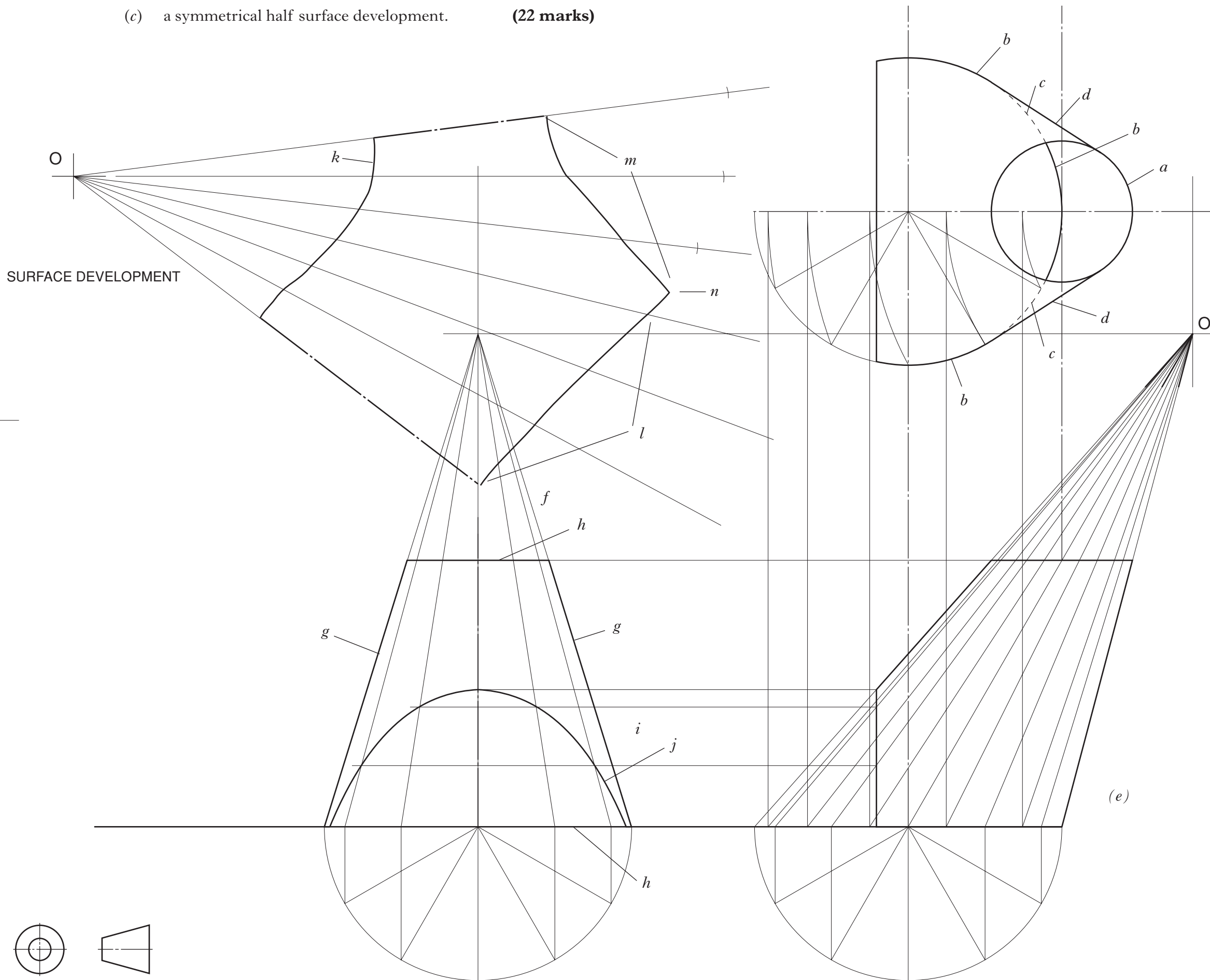
Draw, to the given scale:

- (a) the plan;
- (b) the end elevation;
- (c) a symmetrical half surface development. **(22 marks)**

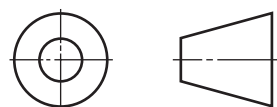
**These solutions are provided as a marking guide and should not be used as a tracing aid. Drawings should be produced by the centre for the production of marking overlays.**

5

**Section B**



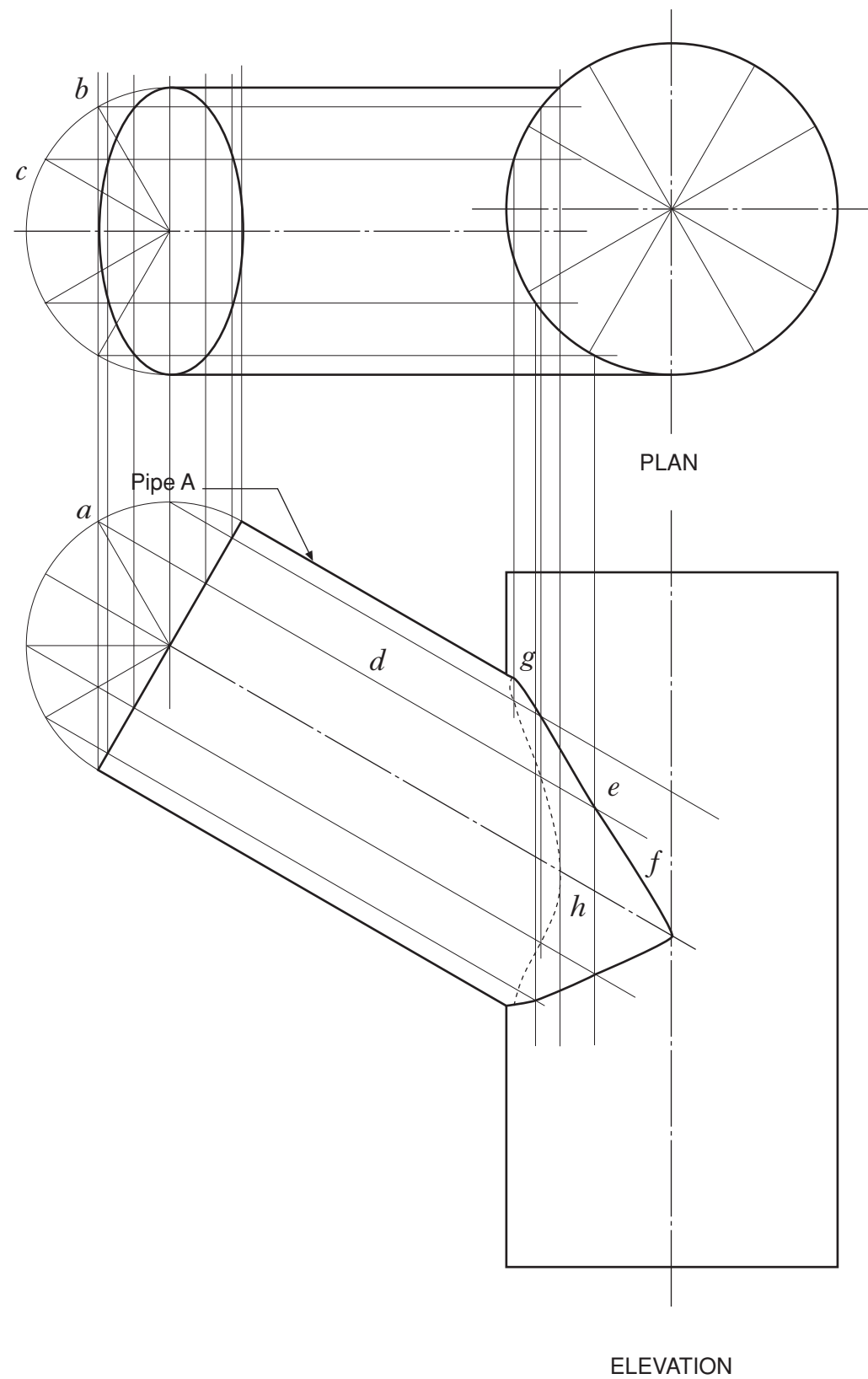
a	
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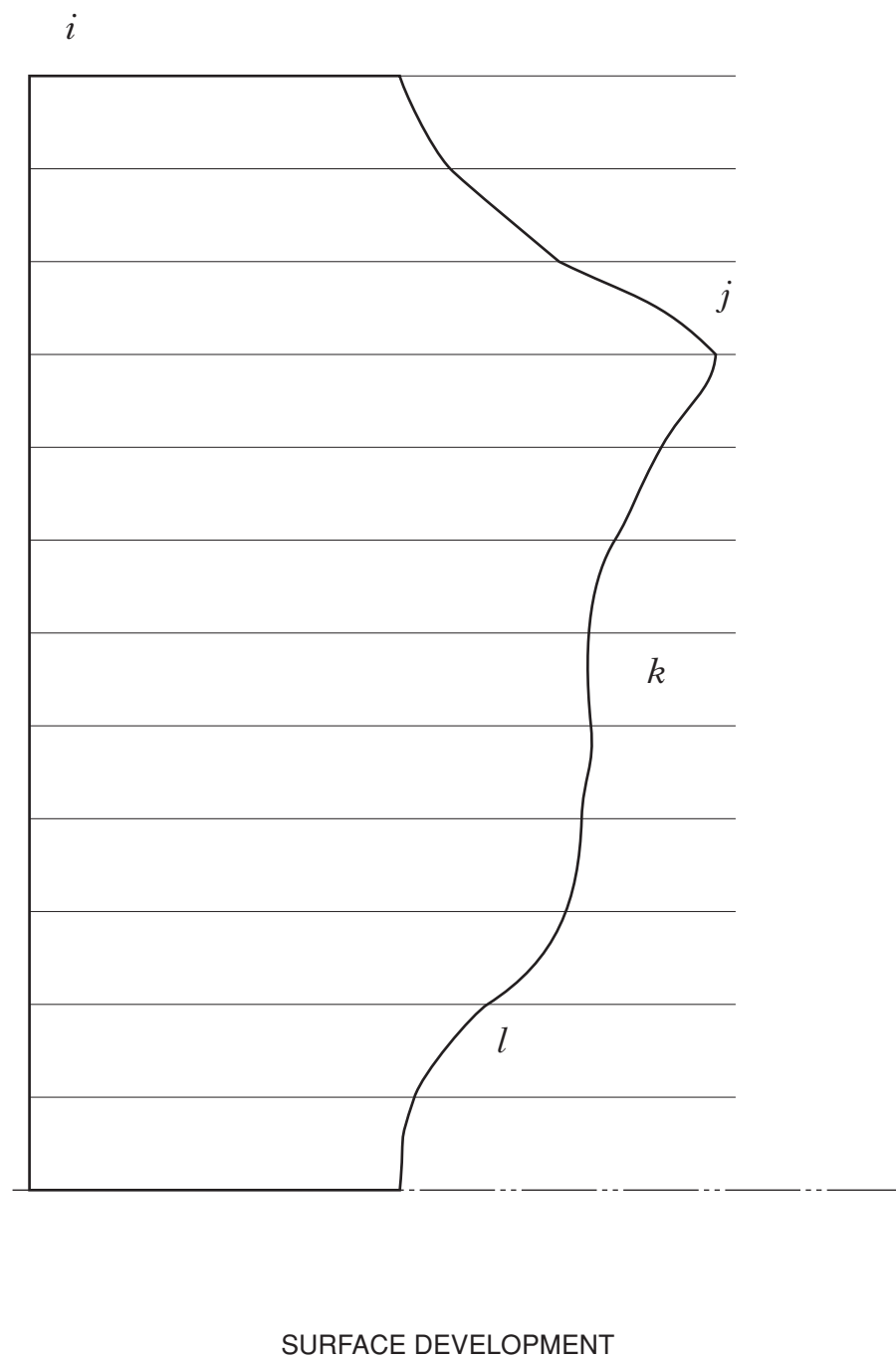
The arrangement of two interpenetrating cylinders is shown below.

Draw, in the positions indicated:

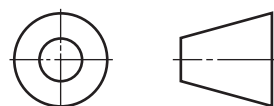
- (a) the completed plan;
- (b) the completed elevation, showing all the curves of interpenetration;
- (c) the surface development of pipe A. (16 marks)



**These solutions are provided as a marking guide and should not be used as a tracing aid. Drawings should be produced by the centre for the production of marking overlays.**



a	
b	
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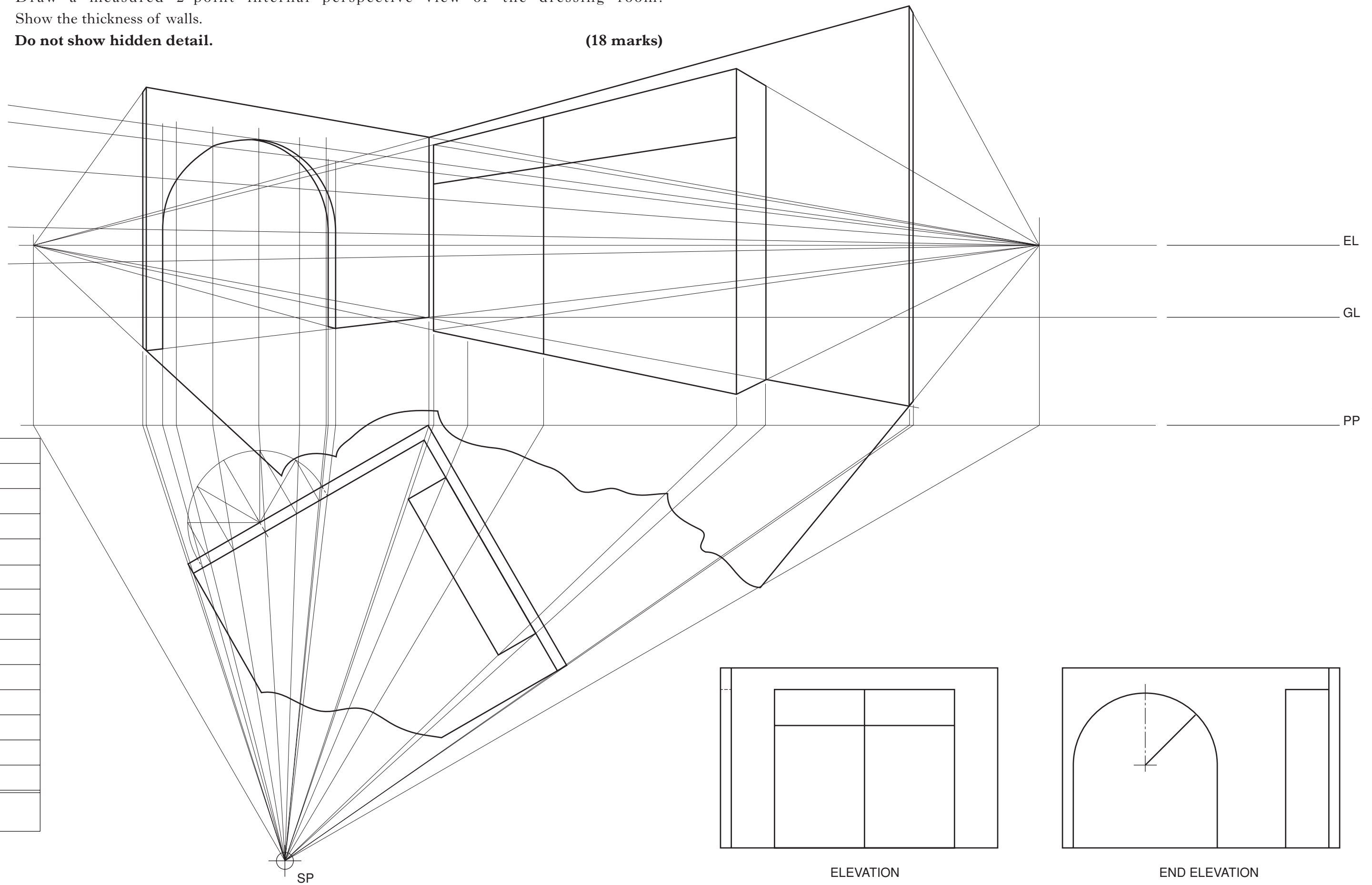
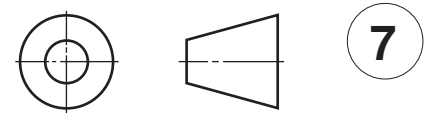
Details of a dressing room showing a wardrobe and an archway through to the bedroom can be seen in the three views below. The ground line GL, eye level EL, picture plane PP and the spectator point SP are also given.

Draw a measured 2-point internal perspective view of the dressing room. Show the thickness of walls.

Do not show hidden detail.

(18 marks)

These solutions are provided as a marking guide and should not be used as a tracing aid. Drawings should be produced by the centre for the production of marking overlays.



a	
b	
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