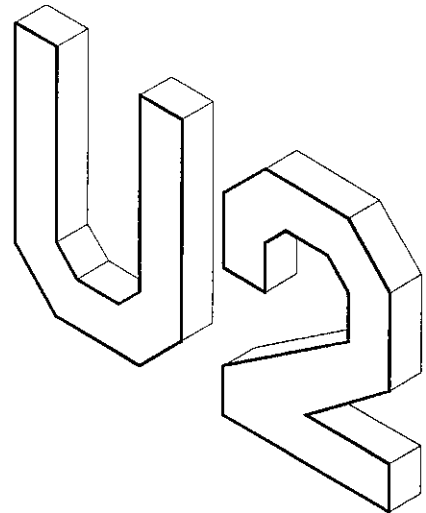
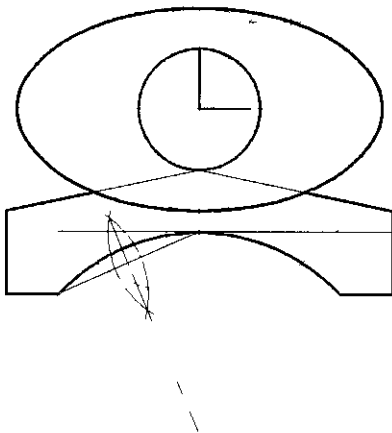


**TECHNICAL GRAPHICS**  
**ORDINARY LEVEL**  
**MARKING CONFERENCE**

**Venue: Athlone Institute of Technology**

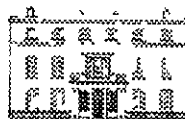
**Tuesday 3rd July 2001 at 10.30a.m.**



**CONFIDENTIAL**

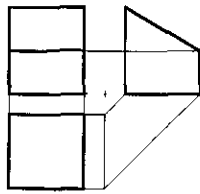
**To be returned once the marking is completed**

**(Section XVI of Booklet S,63 — Instruction to Assistant Examiners)**



AN RÍOIN OIDEACHAIS  
ARUS BOLÁICHTA | DEPARTMENT OF  
EDUCATION AND SCIENCE

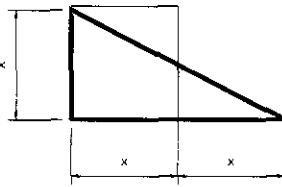
1 Proj. to Elev. 2  
 Comp. Elev. 2  
 Comp. Plan. 8  
 (2 for each line)



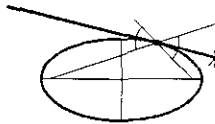
2 12 marks any attempt at freehand sketch

3 (i) 6 marks (i) Keyboard  
 (ii) 6 marks (ii) VDU

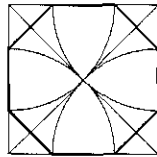
4 Square 12



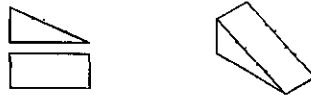
5 Correct Cons. 12  
 (Any line, give 2)



6 Regular Oct. 12  
 ( 8 if irregular )



7 2 each line 12



8 A 2M 6

B 5M 6

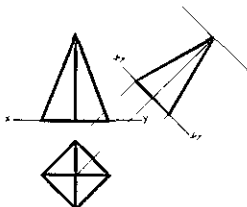
( A 2.1 / 1.9M give 4)

( B 5.1 / 4.9M give 4)

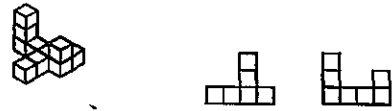
9 15 sq units. 12

14/16 give 8

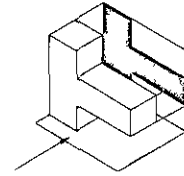
10 Proj. to Aux. 3  
 Correct height 3  
 Comp. Fig. 6  
 (2 for each line)



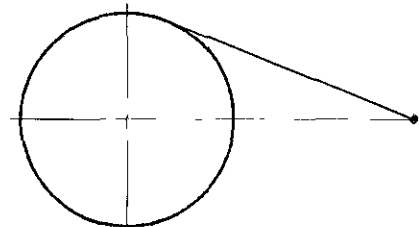
11 6 each  
 2 marks each row, counting  
 from the base up.



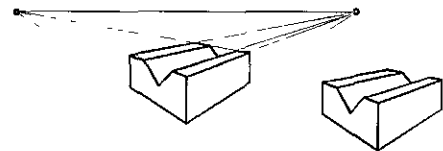
12 Proj. to V.P. 4  
 Outline Fig. 4  
 Shading 4



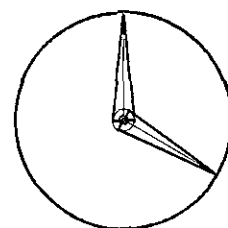
13 Bisect P to Centre 3  
 Drawing Arc 3  
 Showing P.O.C 3  
 Tangent 3



14 Proj. to V.P's 8 (2 each)  
 Comp. Fig. 4 (2 each)

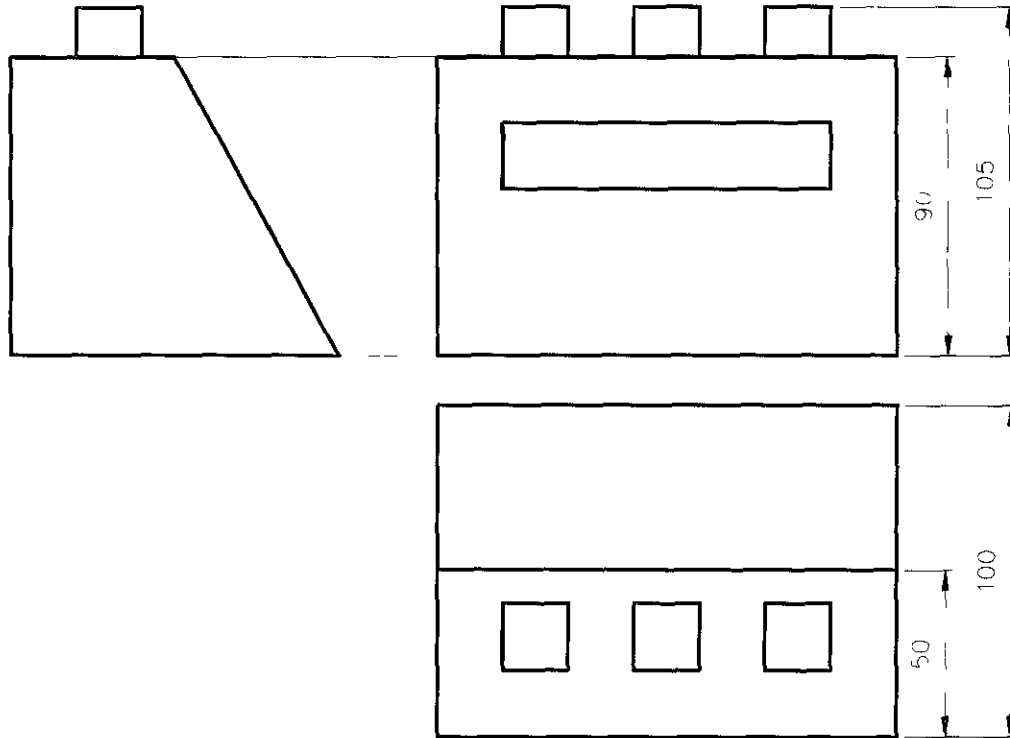


15 Correct 12  
 Incorrect orientation 8



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QUESTION 1 Paper B 2001



**ORTHOGRAPHIC OUTLINE (10)**

**ELEVATION (18)**

- 17 1 each line
- 1 for correct position of buttons

**PLAN (18)**

- 17 1 each line
- 1 for correct position of buttons

**END ELEVATION (8)**

- 6 1 for each line
- 2 for the sloped line

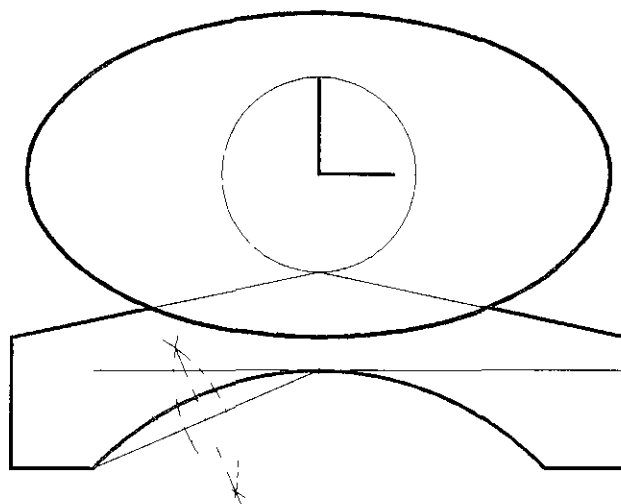
**DIMENSIONS (4)**

**DRAUGHTING (12)**

MARKS
10
17
1
17
1
6
2
4
12

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QUESTION 2 Paper B 2001



**ELLIPSE & CLOCK FACE (32)**

- 8 Major & Minor Axis, 2 x 4 each
- 14 **Locating points on the curve**
- 6 Drawing curve
- 4 Clock face, 2 circle, 1 each for hands

**BASE (26)**

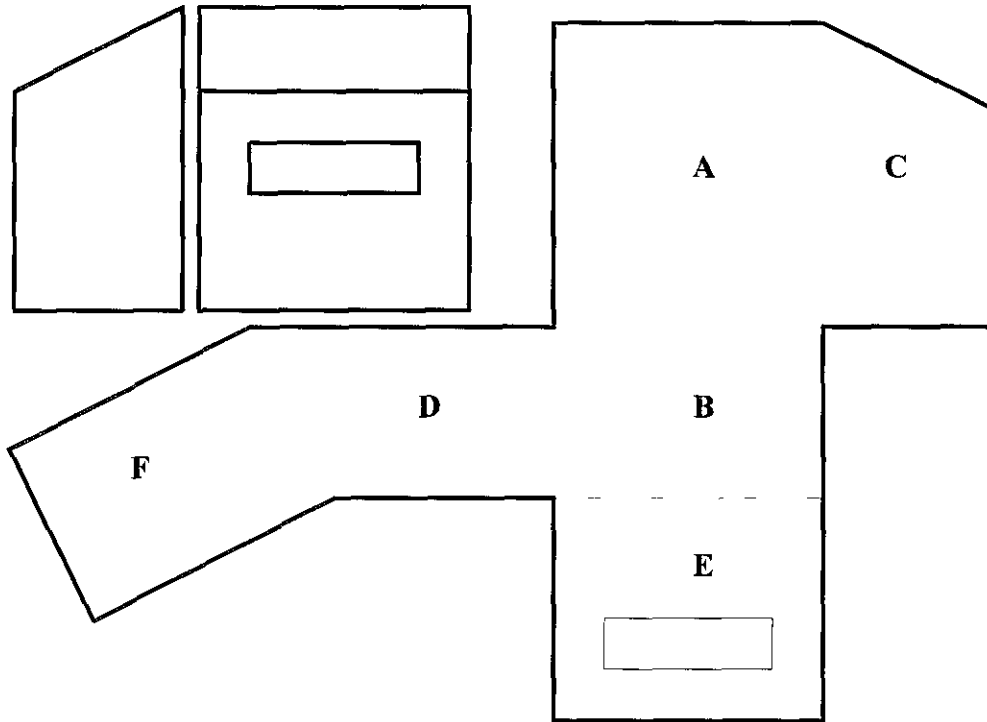
- 2 190 mm width
- 16 2 each 25mm lines, 2 each 40mm lines,  
3 each sloping lines, 2 offset 30mm
- 6 **Location of centre for curve**
- 2 Drawing curve

**DRAUGHTING (12)**

MARKS
8
14
6
4
2
16
6
2
12

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QUESTION 3 Paper B 2001



**ORTHOGRAPHIC OUTLINE (20)**

- 6 Outline of Elevation and End Elevation
- 9 Elevation, 1 for each line
- 5 End Elevation, 1 for each line, 2 for sloped line

**DEVELOPMENT (38)**

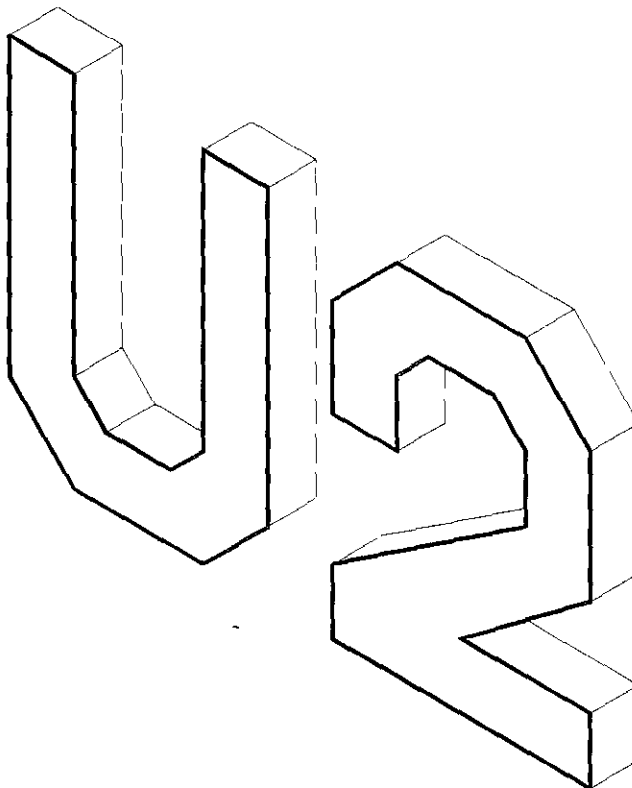
- 4 Side A, Back 1 for each line
- 3 Side B, Base ”
- 4 Side C ” , 2 for sloped line
- 4 Side D ” , 2 for sloped line
- 7 Front E ”
- 3 Correct position of opening in E.
- 3 Top F ”
- 5 **Fold lines hatched**
- 5 **Economy of folds (One piece development)**

**DRAUGHTING (12)**

MARKS
6
9
5
4
3
4
4
7
3
3
5
5
12

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QUESTION 4a Paper B 2001



**OUTLINE IN ISOMETRIC (15)**

- 9 Outline height, length and depth 3 x 3 each (-1 for each if inaccurate)
- 6 30° angle (-6 if isometric grid paper is used)

**COMPLETION OF FRONT FACE (29)**

- 24 Letter U 2 for each line
- 34 Number 2 2 for each line

**COMPLETION OF BACK (14)**

- 15 30° lines, etc 1 for each line
- 13 Back lines 1 for each line

**N.B.**  
All Marks  
in this  
section  
to be  
halved

**DRAUGHTING (12)**

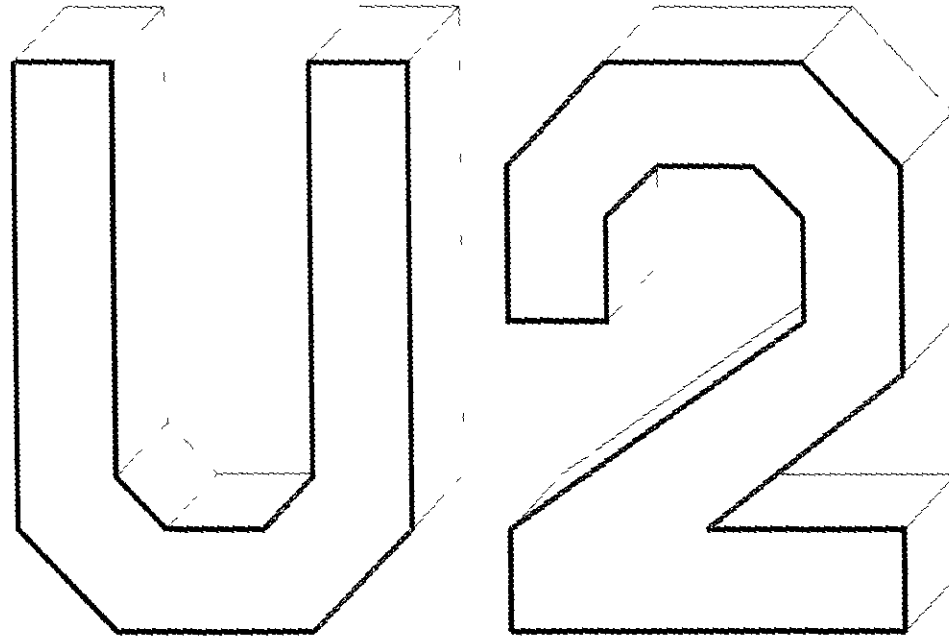
MARKS	
9	
6	
12	
17	
	43
14	
12	

**N.B.**

If the solution is presented on isometric grid paper only, apply the scheme, but multiply this mark by 75

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QUESTION 4b Paper B 2001



**OUTLINE IN OBLIQUE (15)**

- 9 Outline height, length and depth 3 x 3 each (-1 for each if inaccurate)
- 6 45° angle (-6 if squared grid paper is used)

**COMPLETION OF FRONT FACE (29)**

- 24 Letter U 2 for each line
- 34 Number 2 2 for each line

**COMPLETION OF BACK (14)**

- 15 45° lines, etc 1 for each line
- 13 Back lines 1 for each line

**N.B.  
All Marks  
in this  
section  
to be  
halved**

**DRAUGHTING (12)**

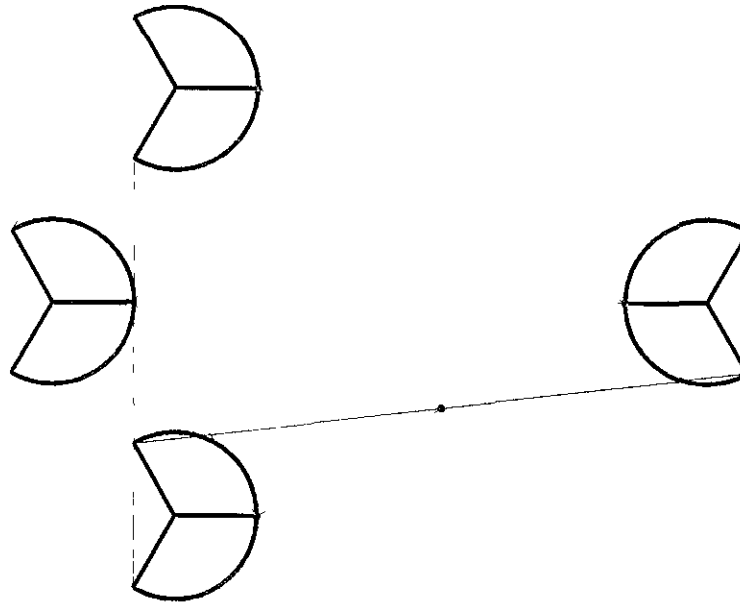
MARKS	
9	
6	
12	
17	
	43
14	
12	

**N.B.**

If the solution is presented on squared grid paper only, apply the scheme, but multiply this mark by 75

**AN ROINN OIDEACHAIS AGUS EOLAÍOCHTA**

**QUESTION 5 Paper B 2001**



**SETTING UP (22)**

- 8 Figure F, 2 R25 circle, lines 3 x 2 each
- 2 150mm Horizontal line
- 12 30°&60° lines Top and Bottom ( 4 x 3 each )

**TRANSLATION (10)**

- 2 **Line Parallel to AA1**
- 8 **Completion of Figure**  
( 2 circle, lines 3 x 2 each )

**AXIAL SYMMETRY (10)**

- 2 **Line A1A2**
- 8 **Completion of Figure**  
( 2 circle, lines 3 x 2 each )

**CENTRAL SYMMETRY (16)**

- 6 **Bisect A2A3 line to locate Z**
- 2 **Line to locate orientation**
- 8 **Completion of Figure**  
( 2 circle, lines 3 x 2 each )

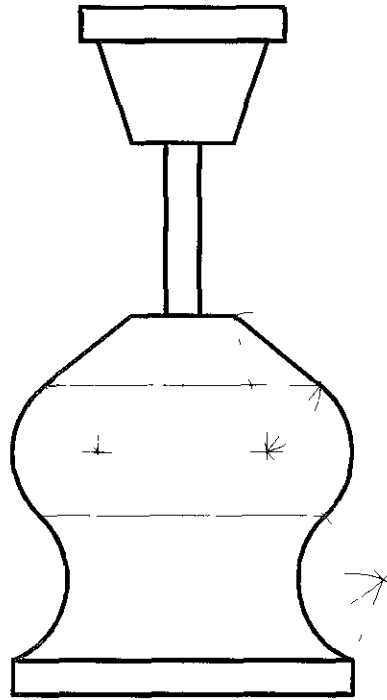
**DRAUGHTING (12)**

<b>MARKS</b>
<b>8</b>
<b>2</b>
<b>12</b>
<b>2</b>
<b>8</b>
<b>2</b>
<b>8</b>
<b>6</b>
<b>2</b>
<b>8</b>
<b>12</b>



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QUESTION 6 Paper B 2001



**SETTING UP (38)**

	2	Centre line 200mm	
Top	14	Ceiling Fitting	2 each line
	4	Wire	2 each line
Bottom	10	Shade	2 each line
Circles A&B	8	2 offset 40mm, 2 offset 50mm, 2 each R25 circles	

**COMPLETION (20)**

	8	Tangent lines (2 x 4 each)
	12	Tangential Arcs C & D (2 x 6 each)

**DRAUGHTING (12)**

MARKS
2
14
4
10
8
8
12
12