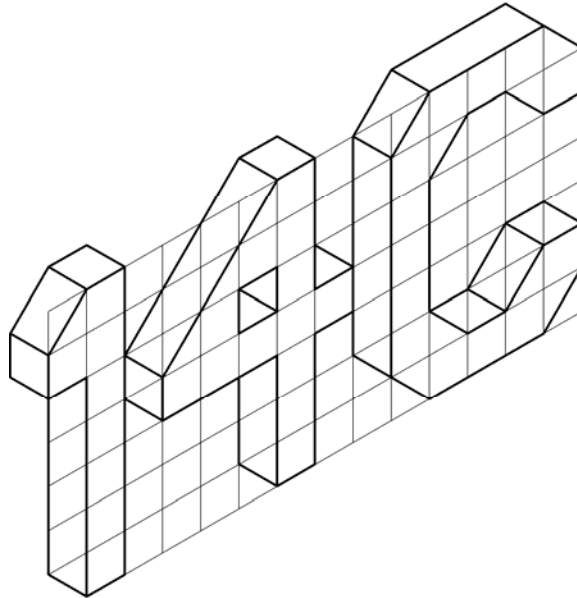




Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate Examination 2006

Grafaic Theicniúil
Gnáthleibhéal



Scéim Mharcála

Roinn A agus B

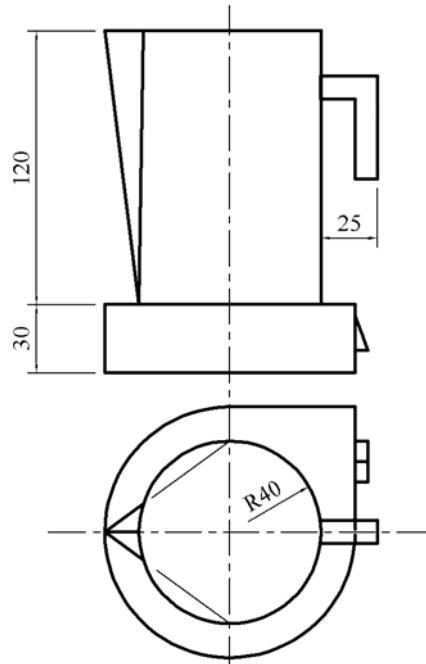
Section A

Award 2 marks for setting up the outline of each solution in this section.

Q1	12	Radio. 6 marks for correct quadrant in the elevation. 6 marks for correct line in the end view. (4+2 marks)
Q2	8 4	for a good quality freehand pictorial sketch. for a good quality colour or shading.
Q3	6 6	Zip Drive/external drive/portable drive Mouse
Q4	12	Correct rectangle
Q5	6 6	Ellipse - Locating points - any correct method Joining points with good quality line
Q6	9 3	Well proportioned freehand orthographic sketch. Application of shading OR colour.
Q7	12	1 mark for each line – Garden seat
Q8	12	A = 0.8M ; B = 2.0M (6 + 6 marks)
Q9	12	2 mark for each line to complete end view – shaped block
Q10	4 4 4	4 marks for right angles to X1 – Y1 4 marks for correct height 1 mark for each line
Q11	12	4 marks for each command (i) CIRCLE (ii) TRIM (iii) HATCH
Q12	4 4 4	1 mark for each projections line to the vertical plane. Outline figure, 1 mark each line. Shading.
Q13	6 6	6 marks for perpendicular 1 - Outline of farm shed 6 marks for perpendicular 2
Q14	12	3 x 2 marks lines to right and 2 x 3 marks lines to left
Q15	6 6	6 marks for OCTAGON 6 marks for ANGLE - 45°

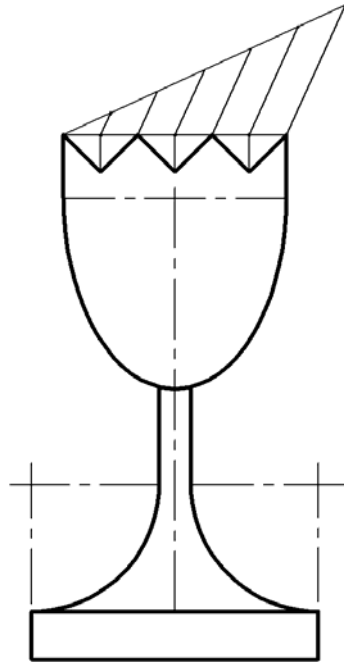
Section B - 2006

Ceist 1 Orthographic Projection



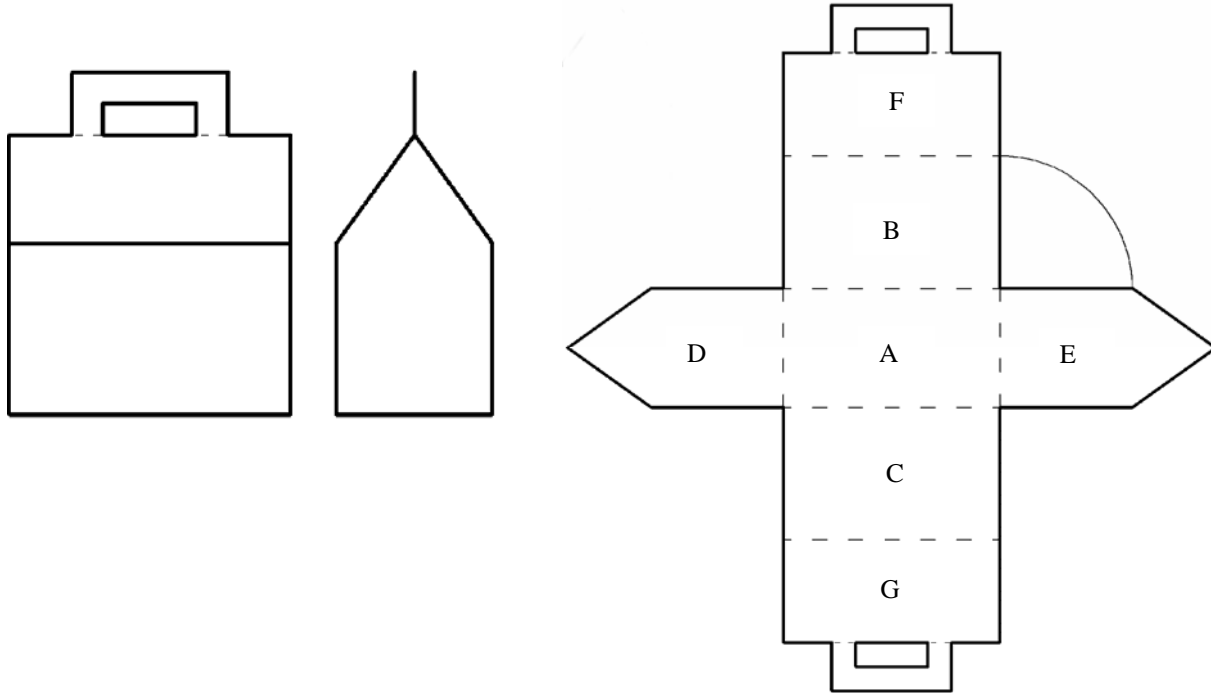
Orthographic Outline (10)	-
10	Plan and elevation positioned correctly
Elevation (20)	
6	Base - 1 mark per line
9	3 marks sloping line <i>plus</i> 3 x 2 marks for other lines
5	1 mark for each line in handle
Plan (24)	
4	Circle 1 inside
6	Circle 2
6	2 marks for each line in spout
4	1 mark for each line in handle
4	1 mark for each line in switch
Dimension lines (4)	
4	1 mark per line
(12)	Drafting, accuracy and presentation

Ceist 2 Egg Cup



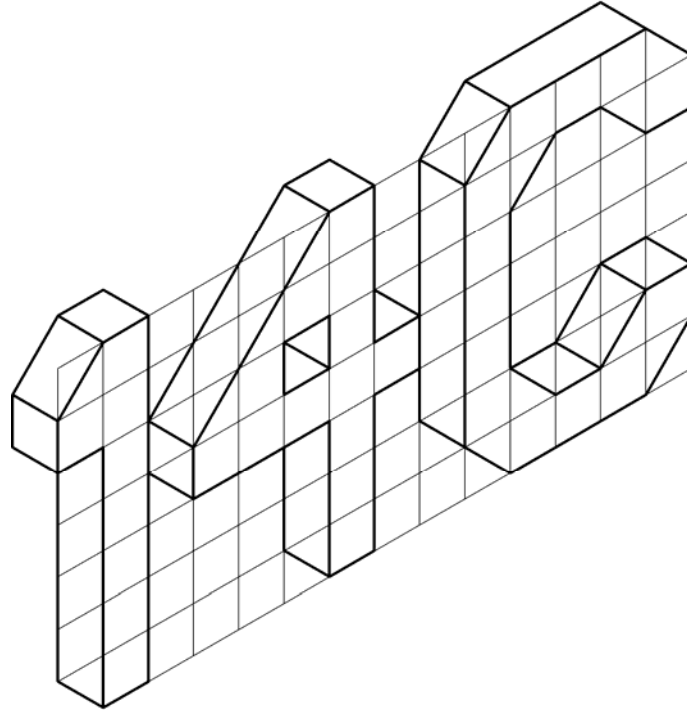
Semi - Ellipse (26 marks)	
8	Semi-Major axis 4 marks & Minor axis 4 marks
12	Correct method for locating points on the curve
6	Drawing curve
Sloping Line (20 marks)	
8	Correct construction line and divisions
6	Two vertical heights - 3 marks each height
6	Vee lines (6x1 marks)
Base and stem (12)	
2	Width of stem
2	Centre of Quadrants (2x1 marks)
4	Draw Quadrants (2x2 marks)
4	Base – 1 mark per line
(12)	Drafting, accuracy and presentation

Ceist 3 Surface Development



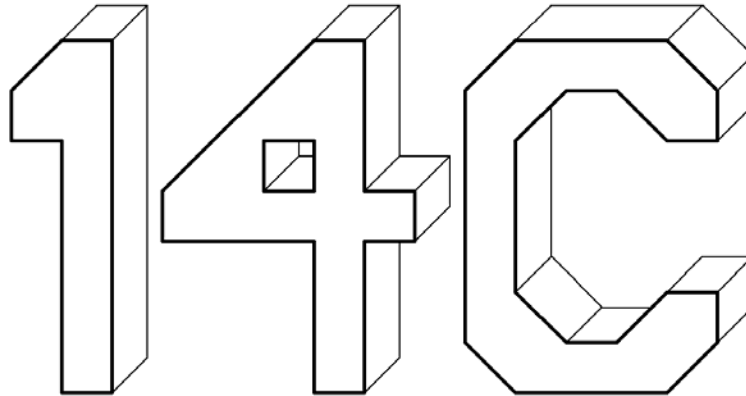
Orthographic (21)	
3	End elevation in correct position
12	Elevation, - 1 mark each line
6	End elevation, - 1 mark each line
Development (37)	
10	Sides A and B, and C - (1 mark per line)
8	Sides D and E – (2 x 4 marks)
6	Sides F and G – (2 x 3 marks)
7	Handle (1 mark per line)
6	Fold lines, 1 mark each
(12)	Drafting, accuracy and presentation

Ceist 4 Isometric Projection



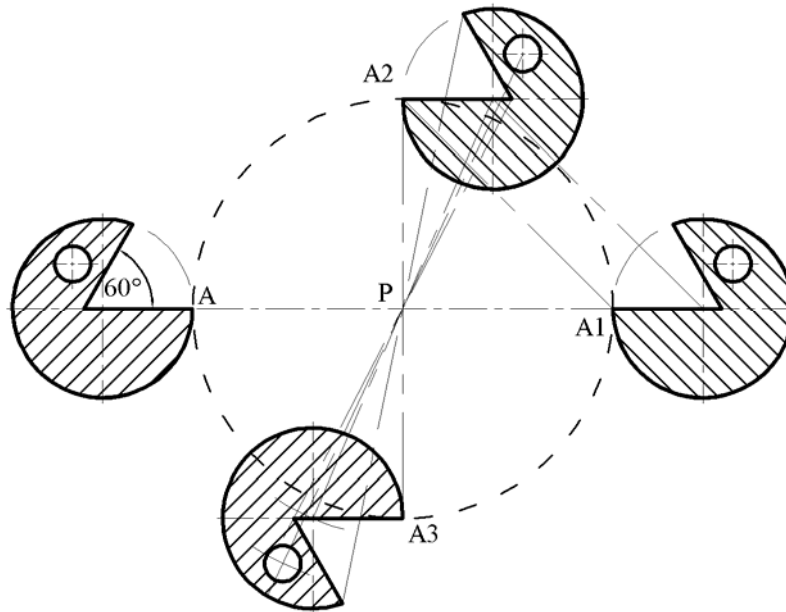
Setting Up (9) total	
6	Outline height, length and width (deduct 2 each if inaccurate)
3	Isometric outline (deduct 1 + 1 if 30° angles are not used)
Front Face 40	
7	Number 1 - 1 mark per line
15	Number 4 - 1 mark per line
18	Letter C - 1 mark per line
Complete 9	3 marks per letter
6	2 marks each per figure for projection and joining lines
3	Shading/colour
(12)	Drafting, accuracy and presentation

Ceist 4 Oblique Projection



Setting Up (9) total	
6	Outline height, length and width (deduct 2 each if inaccurate)
3	Oblique outline (deduct 2 marks if 45° angle not used)
Front Face 40	
7	Number 1 - 1 mark per line
11	Number 4 - 1 mark per line
4	Square - 1 mark per line
18	Letter C - 1 mark per line
Complete 9	3 marks per letter
6	2 marks each per figure for projection and joining lines
3	Shading/colour
(12)	Drafting, accuracy and presentation

Ceist 5 Transformation Geometry



Setting up (16)	
6	R70 circle 2 marks, locating A, A1, A2, A3 - 1 mark each
10	Draw Fig. - 4 marks circle, 4 marks 60° shape, 2 marks small circle
Axial Symmetry (14)	
4	Locating position of centre of Fig.
10	Drawing Fig. as above
Translation (14)	
4	Locating position of centre of Fig.
10	Drawing Fig. as above
Central Symmetry (14)	
4	Locating position of Fig.
10	Drawing Fig. as above
(12)	Drafting, accuracy and presentation

