## TECHNICAL GRAPHICS - ORDINARY LEVEL

## MARKING CONFERENCE 2003

TUESDAY July $1^{\text {st }} 10: 30 \mathrm{am}$

Venue: Institute of Technology, Athlone


## CONFIDENTIAL

To be returned once the marking is complete

Section A

| Q1. | 12 | 2 marks for each correct line in elevation and plan |
| :---: | :---: | :---: |
| Q2. | 12 | Model correctly depicted in a good quality freehand pictorial sketch |
| Q3. | 6 | Printer |
|  | 6 | CD/CD drive |
| Q4. | 12 | Correct Triangle. |
| Q5. | 12 | Correct construction |
| Q6. | 4 | Offset 10 mm vertically |
|  | 4 | Offset 10 mm horizontally |
|  | 4 | 10 mm arc |
| Q7. | 12 | 2 marks for each line. |
| Q8. | 12 | $\mathrm{A}=6.0 \mathrm{~mm} \mathrm{~B}=3.5 \mathrm{~mm} 6$ marks each |
| Q9. | 12 | 90 square units. |
| Q10. | 3 | Projections to the auxiliary plane, 1 mark each line. |
|  | 3 | Correct height. |
|  | 6 | Completing the aux. Figure, 2 marks each line. |
| Q11. | 12 | 6 marks each. |
| Q12. | 4 | Projections to the vertical plane. |
|  | 4 | Outline figure. |
|  | 4 | Shading. |
| Q13. | 12 | Recognised construction to determine points of contact. |
| Q14. | 10 | Projections to the V.P's, 2 marks each. |
|  | 2 | Completing the figure. |
| Q15. | 12 | $90^{\circ}$ |
|  | 10 | $270^{\circ}$ |

## Section B

## Q. 1 Section B — Camcorder (Orthographic Projection)



| $\mathbf{1 0}$ | Orthographic outline (10) <br> Correct orientation of elevation, plan and end elevation. |
| :---: | :--- |
| Elevation (9) |  |
| $\mathbf{9}$ | 1 mark for each line. |
| Plan (13) |  |
| $\mathbf{1 3}$ | 1 mark for each line. |
| $\mathbf{1 5}$ | End elevation (22) |
| $\mathbf{3}$ | R25 circle. |
| $\mathbf{4}$ | Correct position of screen and view finder. |
| $\mathbf{1 2}$ | Draughtsmanship |

Total marks $=70$

## Q. 2 Section B - Perfume Bottle (ellipse)



| Orthographic Outline (10) |  |
| :---: | :--- |
| $\mathbf{1 0}$ | Elevation, plan and end elevation, correctly arranged. |
| Elevation (9) |  |
| $\mathbf{9}$ | 1 mark for each correct line in the elevation. |
| Plan (13) |  |
| $\mathbf{1 3}$ | 1 mark for each correct line in the plan. |
| $\mathbf{1 5}$ | End Elevation (22) |
| $\mathbf{3}$ | R 25 circle |
| $\mathbf{4}$ | Correct position of the view finder. |
|  | Dimensioning (4) |
| $\mathbf{4}$ | 1 mark for each. |
| $\mathbf{1 2}$ | Draughtsmanship |

Total marks $=70$

## Q. 3 Section B - Storage Box (Development)



| Orthographic outline (18) |  |
| :---: | :--- |
| $\mathbf{6}$ | Correct orientation of the end elevation. |
| $\mathbf{6}$ | Elevation, 1 mark for each line. |
| $\mathbf{6}$ | End elevation, 1 mark for each line. |
| Development (40) |  |
| $\mathbf{1 3}$ | Sides A,B,C, and D. 1 mark each line. |
| $\mathbf{1 0}$ | Sides E and F, 1 mark each line. |
| $\mathbf{6}$ | True length of side X. |
| $\mathbf{5}$ | Fold lines hatched. |
| $\mathbf{6}$ | Economy of folds, (one piece development) |
| $\mathbf{1 2}$ | Draughtsmanship |

Total marks $=70$

## Q. 4. Section B - Pictorial (Isometric)



|  |  |
| :---: | :--- |
| $\mathbf{9}$ | Outline in Isometric (14) |
| $\mathbf{5}$ | Outline height, length and depth, 3 marks each. |
| Completion of Garden Shed (44) |  |
| $\mathbf{2 8}$ | Walls, windows and door, 1 mark for each line. |
| $\mathbf{1 6}$ | Roof, 1 mark for each line. |
| $\mathbf{1 2}$ | Draughtsmanship |

Total marks $=70$

## Q.4. Section B - Pictorial (Oblique)



|  |  |
| :---: | :--- |
|  | Outline in Isometric (14) |
| $\mathbf{9}$ | Outline height, length and depth, 3 marks each. |
| $\mathbf{5}$ | $30^{\circ}$ angle, correctly applied. |
| Completion of Garden Shed (44) |  |
| $\mathbf{2 8}$ | Walls, windows and door, 1 mark for each line. |
| $\mathbf{1 6}$ | Roof, 1 mark for each line. |
| $\mathbf{1 2}$ | Draughtsmanship |

Total marks = 70

## Q. 5 Section B - Transformation Geometry



| Setting up (18) |  |  |
| :---: | :--- | :---: |
| $\mathbf{1 0}$ | 8 for trapezoid, 2 marks each line + 1 mark each 100mm\&175mm lengths. |  |
| $\mathbf{8}$ | Fig. F, 4 marks circle, 2 marks each line. |  |
| Translation (12) |  |  |
| $\mathbf{4}$ | Line projected parallel to AA1. |  |
| $\mathbf{8}$ | Fig. F, 4 marks circle, 2 marks each line. |  |
| Axial Symmetry (12) |  |  |
| $\mathbf{4}$ | Line A1A2 to fix position. |  |
| $\mathbf{8}$ | Fig. F, 4 marks circle, 2 marks each line. |  |
|  | Central Symmetry (16) |  |
| $\mathbf{4}$ | Bisecting A2A3 to locate point Z. |  |
| $\mathbf{4}$ | Line to locate orientation. |  |
| $\mathbf{8}$ | Fig. F, 4 marks circle, 2 marks each line. |  |
| $\mathbf{1 2}$ | Draughtsmanship |  |

## Total marks $=70$

## Q. 6 Section B - Fishing Reel (Plane Figure)



| Setting-up (35) |  |
| :---: | :--- |
| $\mathbf{1 6}$ | Spool, 1 mark for each line. |
| $\mathbf{7}$ | Handle, 1 mark for each line. |
| $\mathbf{1 2}$ | R40 and R25 circles, 4 marks each circle. |
|  |  |
|  | Completion (23) |
| $\mathbf{1 2}$ | Handle (12) |
| $\mathbf{6}$ | Reel(11) |
| $\mathbf{5}$ | Locating centre for R60 arc. |
| $\mathbf{8}$ | Donstruction for tangent |

Total marks $=70$

