# 2014 Graphic Communication 

Higher

## Finalised Marking Instructions

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## Part One: General Marking Principles for Graphic Communication Higher

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the specific Marking Instructions for each question.
(a) Marks for each candidate response must always be assigned in line with these general marking principles and the specific Marking Instructions for the relevant question. If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader/Principal Assessor.
(b) Marking should always be positive ie, marks should be awarded for what is correct and not deducted for errors or omissions.

## GENERAL MARKING ADVICE: Graphic Communication Higher

The marking schemes are written to assist in determining the "minimal acceptable answer" rather than listing every possible correct and incorrect answer. The following notes are offered to support Markers in making judgements on candidates' evidence, and apply to marking both end of unit assessments and course assessments.


Penalty when a line is continued across a base


Penalty when a line is extended/ continued incorrectly


Page 3

Part Two: Marking Instructions for each Question

| Question |  | Expected Answer/s | Max <br> Mark | Additional Guidance |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| $\mathbf{1}$ | a | i | Column rule. | $\mathbf{1}$ |  |
|  |  | ii | Folio/Footer | $\mathbf{1}$ |  |
| iii | Caption | $\mathbf{1}$ |  |  |  |
| b | i | iv | To gent <br> To investigate the target market and <br> function of the proposed document. | $\mathbf{1}$ |  |
|  | ii | Reverse <br> To develop ideas and page layouts for <br> the document. | $\mathbf{1}$ |  |  |
|  | iii | To establish the position and size of the <br> component parts of the document. To <br> enable an electronic version of the <br> document to be produced. | $\mathbf{1}$ |  |  |
|  |  | Total marks | $\mathbf{8}$ |  |  |


| Question |  |  | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | a |  | 1 mark for each correct command | 5 |  |
|  | b |  | Standardisation of parts <br> Quality control <br> Drawing to British Standards | 1 |  |
|  |  |  | Total marks | 6 |  |


| Question |  | Expected Answer/s | Max <br> Mark | Additional Guidance |  |
| ---: | ---: | :--- | :--- | :---: | :---: |
| $\mathbf{3}$ | $\mathbf{a}$ |  | Dimensional tolerance | $\mathbf{1}$ |  |
|  | b | i | They may affect the function of the product | $\mathbf{1}$ |  |
|  |  | ii | They may affect the interchangeability of the <br> product | $\mathbf{1}$ |  |
|  |  | Total marks | $\mathbf{3}$ |  |  |


| Question |  |  | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | a | i | The size of the drawing sheet |  |  |
|  |  | ii | The size of the object being depicted | 1 |  |
|  |  | iii | The degree of detail required | 1 |  |
|  | b | i | Double the size | 1 |  |
|  |  | ii | Half the size | 1 |  |
|  | c | i | Portrait | 1 |  |
|  | c | ii | Landscape | 1 |  |
|  |  |  | Total marks | 7 |  |


| Question |  | Expected Answer/s | Max <br> Mark | Additional Guidance |
| :--- | :--- | :--- | :--- | :---: | :---: |
| $\mathbf{5}$ | $\mathbf{a}$ | Promotional <br> To bring people's attention to or highlight the <br> house or special features of the house. To <br> inform the public about the house. To sell or <br> advertise the house. | $\mathbf{1}$ |  |
| b | Preliminary <br> To convey ideas to a client. To assist in the <br> analysing and planning of the design process. | $\mathbf{1}$ |  |  |
| c | Production <br> To allow the object to be manufactured/ <br> constructed accurately. To provide accurate <br> information. | $\mathbf{1}$ |  |  |


| Question |  |  | Expected Answer/s | Max | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | a |  | Standardisation gives universal comprehension | 1 |  |
|  | b | 1 | Third angle projection | 1 |  |
|  |  | ii | Across the flats | 1 |  |
|  |  | iii | Radius | 1 |  |
|  |  | iv | Diameter | 1 |  |
|  | c |  | Revolved section at $X$ <br> Removed section at $\mathrm{Y}-\mathrm{Y}$ | 1 <br> 1 |  |
|  | d | i | Thread diameter 12 mm Any correct BS for 1 mark | 1 |  |
| d |  | ii | Flat surface | 1 |  |
|  | d | iii | External thread | 1 |  |
|  |  |  | Total marks | 10 |  |



END ELEVATION

Question 7a - Floor Plan extension


Page 9

## Question 7a - Floor Plan Extension

| Question |  | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: |
| 7 | a | Correct length, breadth and location for 1 | 1 |  |
|  | b | Wall outline 10: 6 horizontal, 4 vertical (6 for 1), (10 for 2) | 2 | the vertical lines forming the door opening are included in the wall outline. |
|  | c | Worktop; line and location out from wall for 1 | 1 |  |
|  | d | Windows, door, sink-top, lamp, switches and socket location: <br> (4 for 1), (8 for 2) | 2 | Correct orientation of sinktop required |
|  | e | Windows, door, sink-top, lamp, switches and socket drawn to BS: <br> (4 for 1), (6 for 2) | 2 |  |
|  | f | Hatching to BS on 4 areas for 1 | 1 |  |
|  | g | Dimensions to BS for 1 | 1 |  |
|  |  | Total marks | 10 |  |
|  | $\begin{aligned} & \text { tes: } \\ & \text { ver } \\ & \text { BS } \end{aligned}$ | ines forming the window openings are not include wombol. | d in | wall outline but form part of |

Question 7b - Visitors Centre: Measured Perspective


Page 11

Question 7b - Visitors Centre: Measured Perspective

| Question |  | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: |
| 8 | a | $V P_{\mathrm{R}}$ and $\mathrm{V} P_{\mathrm{L}}$ vanishing points to left and right | 1 |  |
|  | b | Height line, any one correctly positioned and used | 1 |  |
|  | c | Vertical lines 18: Walls 10, Windows 4, Doors <br> 4, Correct vertical location, <br> (2 for 1 ), ( 5 for 2 ), ( 8 for 3), ( 11 for 4 ), <br> (14 for 5 ), (16 for 6), (18 for 7 ) | 7 | Correct location and a start/finish required. |
|  | d | Lines to Left VP 12: Walls 8, Windows 2, Door 2. <br> (2 for 1 ), ( 5 for 2 ), ( 8 for 3 ), ( 10 for 4 ), ( 12 for 5 ) | 5 |  |
|  | e | Lines to Right VP 4: Walls 4 (2 for 1), (4 for 2) | 2 |  |
|  | f | Height of roof correctly located | 1 |  |
|  | g | Sloping lines 11: Main roof 4, Extension roof 3, Wall 2, Window 2. <br> (4 for 1 ), ( 7 for 2 ), ( 11 for 3 ) | 3 |  |
|  |  | Total marks | 20 |  |
|  | s: | must be clearly defined. |  |  |



Question 8 - Auxiliary Bat Box

| Question |  | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: |
| 8 | a | Solid lines 8: 4 @ $45^{\circ}$ to right, 4 @ $45^{\circ}$ to left. (3 for 1), (6 for 2), (8 for 3) | 3 |  |
|  | b | Sloping lines solid 6 (3 for 1), (6 for 2) | 2 |  |
|  | c | Part ellipse bottom, 3 critical, 2 intermediate (2 for 1 ), (4 for 2), (5 for 3) | 3 |  |
|  | d | Part ellipse top, 3 critical, 2 intermediate (2 for 1), (4 for 2), (5 for 3) | 3 |  |
|  | e | Part ellipse back, 3 critical, 2 intermediate (3 for 1), (5 for 2) | 2 |  |
|  | f | Circle solid: | 1 |  |
|  |  | Total marks | 14 |  |



## Question 9 - Watch Clamp

| Question |  | Expected Answer/s | Max <br> Mark | Additional Guidance |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{9}$ | $\mathbf{a}$ | Vertical lines full and hidden 16 <br> (5 for 1), (10 for 2), (16 for 3) | $\mathbf{3}$ |  |
|  | $\mathbf{b}$ | Horizontal lines full and hidden 16 <br> (5 for 1), (10 for 2), (16 for 3) | $\mathbf{3}$ |  |
|  | c | Circular part full/hidden 4 <br> (2 for 1), (4 for 2) | $\mathbf{2}$ |  |

Question 9 - Watch Clamp


Page 17

Question 9 - Watch Clamp

| Questi | Expected Answer/s | Max <br> Mark | Additional Guidance |
| :---: | :---: | :---: | :---: |
| Sectional end elevation - Adjustment wheel |  |  |  |
| d | Vertical lines 6 | 1 |  |
| e | Horizontal lines 11 (5 for 1), (11 for 2) | 2 |  |
| f | Part circle 2 | 1 |  |
| Sectional end elevation - Bolt and top cap |  |  |  |
| g | Vertical lines 10 (5 for 1), (10 for 2) | 2 |  |
| h | Horizontal lines 9 (4 for 1), (9 for 2) | 2 |  |
| i | Curve | 1 |  |
| Sectional end elevation - Body and base cap |  |  |  |
| j | Vertical lines 20 <br> (6 for 1) (13 for 2), (20 for 3) | 3 |  |
| k | Horizontal lines 14 (7 for 1), (14 for 2) | 2 |  |
| I | Fillets in both plan and sectional end elevation (Any 4 for 1) | 1 |  |
| m | Hatching 6 areas (3 for 1), (6 for 2) | 2 |  |
|  | Total marks | 25 |  |



## Question 10 - Wall Light

| Quest | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: |
| Plan |  |  |  |
| a | Horizontal and vertical lines 9 (4 for 1), (9 for 2) | 2 |  |
| b | Curve both sides 14 points (6 critical, 8 intermediate) (6 for 1), (14 for 2) | 2 |  |
| c | Curve of intersection (3 critical, 4 intermediate) (3 for 1), (7 for 2) | 2 |  |
| Development |  |  |  |
| d | Overall length (+3mm, -3 mm ) | 1 |  |
| e | Horizontal and vertical lines 3 (3 for 1) | 1 |  |
| f | Curve, 7 points ( 3 critical, 4 intermediate) (3 for 1), (7 for 2) | 2 |  |
| g | Fair curve at $\mathrm{b}, \mathrm{c}$ and f | 1 |  |
|  | Total Marks | 11 |  |

## Question 11 - Travel Iron



OBLIQUE

## Question 11 - Travel Iron

| Quest | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: |
| a | Lines 22, vertical 9, horizontal 13: (4 for 1 ), (8 for 2 ), ( 12 for 3 ), ( 16 for 4 ), (22 for 5) | 5 |  |
| b | Lines 8 at $45^{\circ}$ : <br> (4 for 1), (8 for 2) | 2 |  |
| c | Sloping lines 15 : <br> (5 for 1 ), (10 for 2), (15 for 3) | 3 |  |
| d | Arcs 5: location and radius required. (2 for 1), (4 for 2), (5 for 3) | 3 |  |
| e | Construction for arch shown clearly on plan: | 1 |  |
| f | Top arch, 7 points: 3 critical, 4 intermediate <br> (3 for 1), (5 for 2), (7 for 3) | 3 |  |
| g | Part arch 4 points: 2 critical, 2 intermediate (2 for 1), (4 for 2) | 2 |  |
| h | Fair curves 3: (3 for 1) | 1 |  |
|  | Total marks | 20 |  |



ISOMETRIC

## Question 12 - Petrol Pump Handle

| Question |  | Expected Answer/s | Max Mark | Additional Guidance |
| :---: | :---: | :---: | :---: | :---: |
| 12 | a | Construction for circles on elevation and end elevation | 1 |  |
|  | b | Isometric Circle 12 points: 4 critical, 8 intermediate (6 for 1), ( 12 for 2 ) | 2 |  |
|  | c | Part circle 5 points: | 1 |  |
|  | d | Lines @ $30^{\circ}$ to right 6: <br> (3 for 1), (6 for 2) | 2 |  |
|  | e | Lines @ $30^{\circ}$ to left 5 : <br> (3 for 1), (5 for 2) | 2 |  |
|  | f | Construction for arcs on elevation and end elevation | 1 |  |
|  | g | Curve at right 4 points: 2 critical, 2 intermediate | 1 |  |
|  | h | Curve at top front 4 points: 2 critical, 2 intermediate (2 for 1), (4 for 2) | 2 |  |
|  | i | Curve at back 4 points: 2 critical, 2 intermediate (2 for 1), (4 for 2 ) | 2 |  |
|  | j | Sloping lines 9: <br> (3 for 1), (6 for 2), (9 for 3) | 3 |  |
|  | k | Vertical lines 2: | 1 |  |
|  | I | Lines for trigger 2: Correct position and correct angle 1 mark for each line | 2 |  |
|  |  | Total marks | 20 |  |

