



National  
Qualifications  
2017

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## 2017 Graphic Communication

### National 5

## Finalised Marking Instructions

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## General marking principles for National 5 Graphic Communication

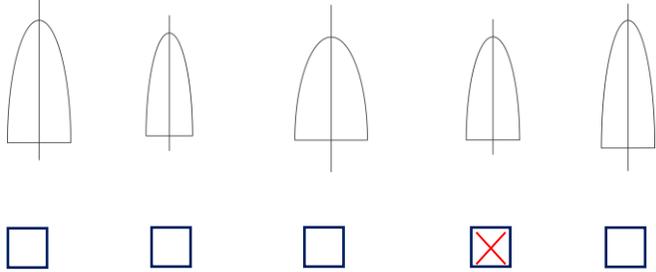
*This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the detailed marking instructions, which identify the key features required in candidate responses.*

- (a) Marks for each candidate response must always be assigned in line with these general marking principles and the detailed marking instructions for this assessment.
- (b) Marking should always be positive. This means that, for each candidate response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding: they are not deducted from a maximum on the basis of errors or omissions.
- (c) 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.

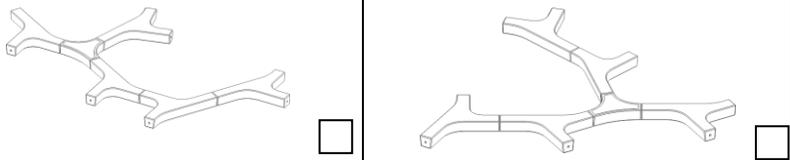
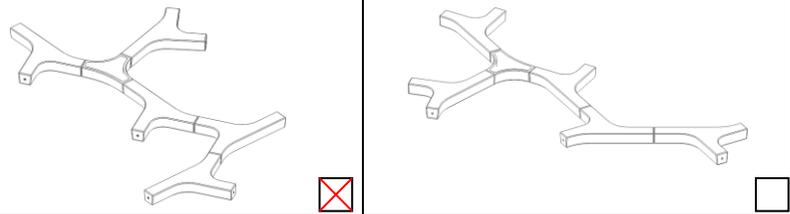
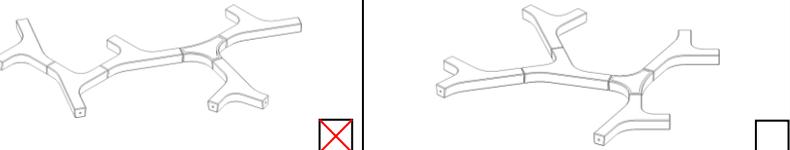
Detailed marking instructions for each question

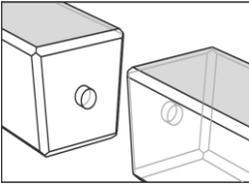
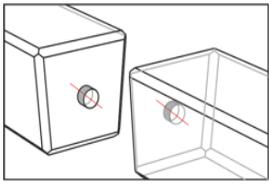
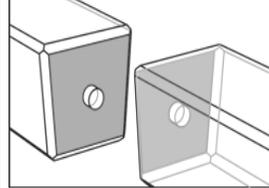
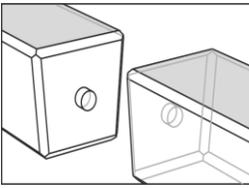
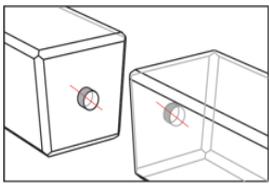
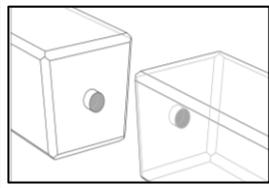
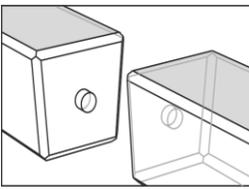
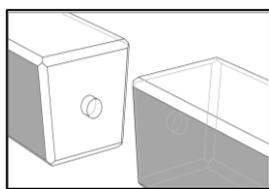
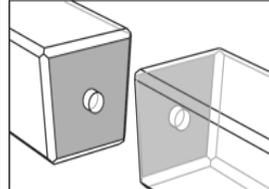
Question			Expected response	Max mark	Additional guidance
1.	(a)	(i)	<ul style="list-style-type: none"> <li>• Clear view of each component of the product</li> <li>• Shows assembly order/fit together</li> <li>• Easier to understand by a wider audience (non-technical person)</li> </ul>	1	
		(ii)	<ul style="list-style-type: none"> <li>• All component parts are in view</li> <li>• All component parts are correctly aligned</li> <li>• There is day-light (clearance) between all component parts</li> <li>• All component parts are assembled in sequence</li> <li>• Uniform distance of exploded parts</li> </ul>	3	Do not accept 'Isometric'
	(b)			1	

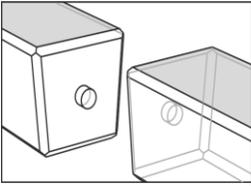
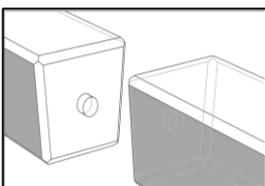
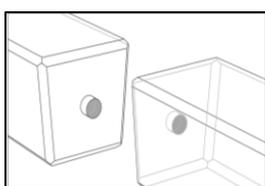
Question		Expected response	Max mark	Additional guidance
1.	(c)		1	

Question		Expected response	Max mark	Additional guidance
1.	(d)		1	
	(e)	<ul style="list-style-type: none"> <li>• Hatching runs in opposite direction</li> <li>• Vary the spacing/pitch of hatching</li> <li>• Vary the angle of hatching (other than 45°)</li> </ul>	2	
	(f)	<p>Any two from the following;</p> <ul style="list-style-type: none"> <li>• Webs</li> <li>• Axle/shaft</li> <li>• Screws</li> <li>• Bolts</li> <li>• Nuts</li> <li>• Pins</li> <li>• Holes</li> <li>• Voids</li> <li>• Washer</li> </ul>	2	
	(g)	<p><b>Revolve approach:</b></p> <ul style="list-style-type: none"> <li>• Create initial profile making reference to correct dimensions (1 mark)</li> <li>• Revolve 360 degrees around centre axis (1 mark)</li> <li>• Create triangle profile/sketch making reference to correct dimensions (1 mark)</li> <li>• Subtract required material (1 mark)</li> </ul>	4	<p><b>Extrusion approach:</b></p> <ul style="list-style-type: none"> <li>• Extrude Ø20 circle 50mm (1 mark)</li> <li>• Extrude Ø10 circle 5mm (in appropriate position) (1 mark)</li> <li>• Create triangle profile/sketch/shape making reference to correct dimensions (1 mark)</li> <li>• Subtract required material (1 mark)</li> </ul>

Question			Expected response	Max mark	Additional guidance
2.	(a)	(i)	<b>Alignment:</b> <ul style="list-style-type: none"> <li>• Logo left aligned with body text</li> <li>• 'Blic' brand left aligned with orange strap line/sub-heading</li> <li>• Body text aligned with top of 'blic' brand</li> <li>• Coloured logos aligned centrally/horizontal</li> <li>• Bottom of letter 'C' on brand aligned with 'arm' of seating plan view</li> <li>• Bottom of seating plan view aligned with bottom of logos</li> </ul>	1	Any response must make reference to the <b>relationship</b> between <b>separate</b> items.
		(ii)	<b>Unity:</b> <ul style="list-style-type: none"> <li>• Unity created through alignment</li> <li>• Unity created through colour</li> <li>• Text and graphic make use of outline</li> <li>• Background image ties many of the elements together</li> </ul>	1	Any response must make reference to the <b>relationship</b> between <b>separate</b> items.  Any other relevant response that demonstrates the creation of unity.
		(iii)	<b>Contrast:</b> <ul style="list-style-type: none"> <li>• Reference to any two contrasting colours on the layout</li> <li>• Outlined and rendered graphics</li> <li>• Reference to the contrast between dark graphic and 'blic' outlined text</li> <li>• Size of text</li> </ul>	1	Any response must make reference to the <b>relationship</b> between <b>separate</b> items.
	(b)		<ul style="list-style-type: none"> <li>• Information conveyed quickly</li> <li>• Exposure to audience is time limited</li> <li>• Eye catching design to create instant interest</li> <li>• Information is kept to a minimum</li> <li>• Large dominant image</li> </ul>	1	

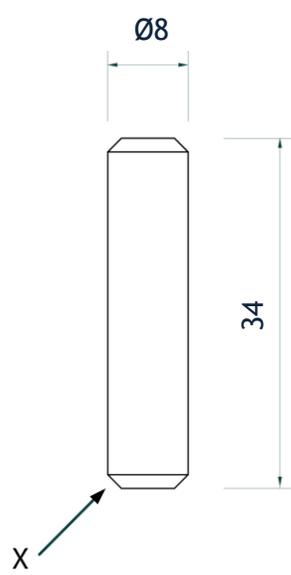
Question		Expected response	Max mark	Additional guidance
2.	(c)	<ul style="list-style-type: none"> <li>Ensures correct alignment</li> <li>Effective spacing</li> <li>Allows a good level of accuracy</li> <li>Speeds up process</li> <li>Negates use of guides.</li> <li>Assist in sizing of objects</li> </ul>	2	
	(d)		2	
				
				
(e)	(i)	Mirror	1	
	(ii)	<ul style="list-style-type: none"> <li>Guarantees level of accuracy/symmetry</li> <li>Time saved by not having to redraw</li> </ul>	1	Apply follow on rule where appropriate. Do not accept statement of single terms. To achieve full mark, response must describe the benefit.
(f)	(i)	Subtraction	1	
	(ii)	Fillet	1	
	(iii)	Chamfer	1	

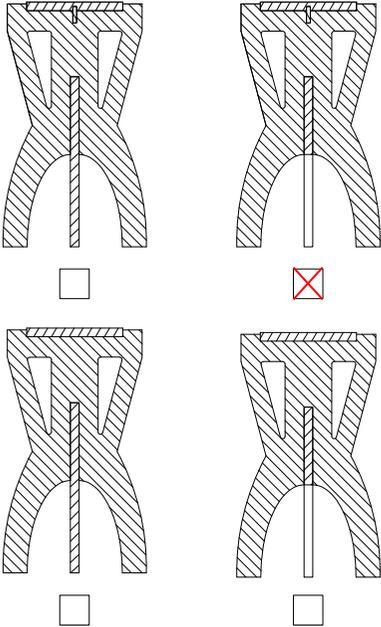
Question		Expected response			Max mark	Additional guidance
(g)	(i)				5	<p>Also accept 'Aligned' for constraint.</p> <p>For centre axis identification - accept shading and/or identified drawn centre axis.</p> <p>Responses two and three can be done in reverse order.</p>
		Constraint used Align	Constraint used Centre Axis	Constraint used Mate		
		OR				
						
		Constraint used Align	Constraint used Centre Axis	Constraint used Mate		
		OR				
						
		Constraint used Align	Constraint used Align	Constraint used Mate		
		OR				

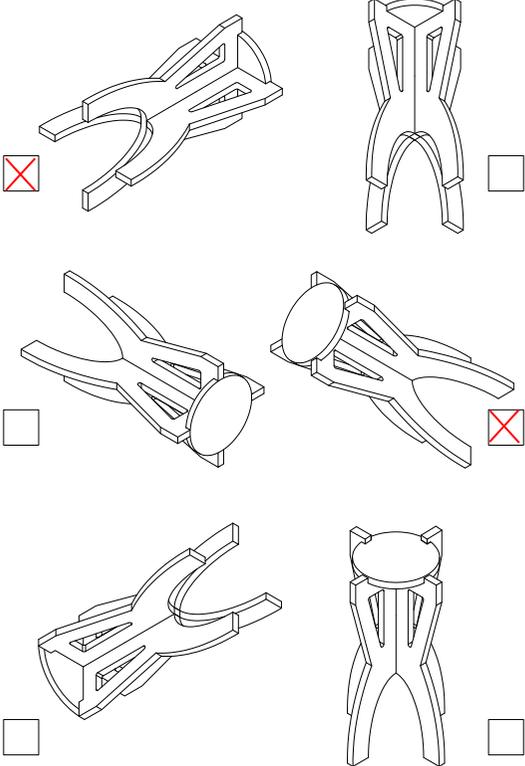
Question		Expected response			Max mark	Additional guidance
						
		<p><b>Constraint used</b> Align</p>	<p><b>Constraint used</b> Align</p>	<p><b>Constraint used</b> Mate</p>		
	(ii)	<ul style="list-style-type: none"> <li>• Same component can be used over and over</li> <li>• No need to re-draw repeated components</li> <li>• Less chance of errors</li> <li>• Speeds up production</li> <li>• Standardisation</li> </ul>			2	

Question		Expected response			Max mark	Additional guidance	
3.	(a)		<b>Bottom Tile</b>	<b>Top Tile</b>	<b>Resultant Colour</b>	<b>3</b>	
			Red	Yellow	<b>ORANGE</b>		
			Yellow	<b>BLUE</b>	Green		
			Blue	<b>RED</b>	Violet		
	(b)	<ul style="list-style-type: none"> <li>Black/grey is added to create a shade</li> </ul>			<b>1</b>		
	(c)	<ul style="list-style-type: none"> <li>Allows different elements of the app to stand out and be easily recognisable by the user</li> <li>Eye catching</li> <li>Creates visual interest/excitement</li> <li>Appeal to target audience</li> </ul>			<b>1</b>		
	(d)	(i)	Fold Line			<b>1</b>	Do not accept 'Folded' line
		(ii)	Centre Line			<b>1</b>	

Question		Expected response	Max mark	Additional guidance
4.	(a)	Pie Chart	1	
	(b)	<ul style="list-style-type: none"> <li>• Illustrates and compares percentages</li> <li>• Each segment is proportional to the quantity it represents</li> <li>• A segment has a dedicated colour to differentiate it from other segments</li> </ul>	2	
	(c)	<ul style="list-style-type: none"> <li>• Colour picking process (accept any response that clearly describes the process of colour picking and the tools involved)</li> <li>• Note the colour codes of a graphic (Pantone, CMYK or RGB acceptable) and apply consistently to other graphics</li> <li>• Copy and paste a graphic and <b>manipulate</b></li> <li>• Make use of a standard colour palette</li> </ul>	2	
	(d)	<ul style="list-style-type: none"> <li>• Use recycled materials for the cards and packaging</li> <li>• Cards and packaging can be made from recyclable materials</li> <li>• Print the cards using soy inks/sustainable inks</li> <li>• Use less ink</li> <li>• Ensure no spacing between cards to reduce amount of waste card</li> <li>• Smaller card size</li> <li>• Reduce gauge of card</li> <li>• Reduce the amount of material used for packaging</li> </ul>	3	<p><b>Must</b> give reason/s for both materials and printing to achieve full marks and be relevant to the production stage.</p> <p>Maximum of 2 marks can be awarded if the candidates make reference to only Materials <b>OR</b> Printing.</p> <p>Accept responses referring to biodegradable materials and inks.</p>

Question			Expected response	Max mark	Additional guidance
5.	(a)	(i)	200mm	1	Units not essential Diameter symbol not required
		(ii)	160mm	1	Units not essential
		(iii)	280mm	1	Units not essential
		(iv)	50mm	1	Units not essential
	(b)	(i)		2	Orientation and position must be correct to British Standard Conventions to achieve both marks.  Diameter symbol must be used.
		(ii)	Chamfer	1	

Question		Expected response	Max mark	Additional guidance
5.	(c)	 <p>The diagrams show a cross-section of a mechanical part with a central hole. The part has a top flange and a bottom flange. The central hole is partially filled with a vertical rod. The top-left diagram shows the rod with a chamfered end, with a square box below it. The top-right diagram shows the rod with a chamfered end, with a red square containing a diagonal cross below it. The bottom-left diagram shows the rod with a chamfered end, with a square box below it. The bottom-right diagram shows the rod with a chamfered end, with a square box below it.</p>	1	

Question	Expected response	Max mark	Additional guidance
5. (d)		2	

[END OF MARKING INSTRUCTIONS]