National
Qualifications
2022

2022 Graphic Communication

N5

Finalised Marking Instructions

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General marking principles for National 5 Graphic Communication

Always apply these general principles. Use them in conjunction with the specific marking instructions, which identify the key features required in candidates' responses.

(a) Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.

(b) If a 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.

(c) For 'Describe' questions
Candidates must provide a statement or structure of characteristics and/or features, not just an outline or a list. For example they can refer to a concept, experiment, situation or facts in the context of and appropriate to the question. The number of marks available for a question indicates the number of factual/appropriate points required.

(d) For 'Explain' questions
Candidates must relate cause and effect and/or define relationships. This must be in the context of the question, or a specific area within the question.

(e) For 'Compare' questions
Candidates must demonstrate knowledge and understanding of the similarities and/or differences between things, methods, or choices. This must be in the context of the question, or a specific area within the question.

(f) Candidates can respond to any question using text, sketching, annotations or combinations of these. Award marks for the information conveyed. Do not award marks for the quality of sketching.

Marking instructions for each question

Question			Expected response	Max mark	Additional guidance
1.	(a)		• Use of **limited** colour palette. • Use of silhouettes. • Use of white space. • Use of simple/basic rectangular shapes. • Sans Serif font used. • The style of font used is modern. • Use of modern/simple arrow style in the title. • Minimal amount of information conveyed.	**2**	White space demonstrates knowledge above N5 level.
	(b)	(i)	**Alignment:** • The heading 'Shape Up' and text below all left align • The text at the top of the web page align horizontally • "Home" left aligns to the orange rectangle • "Menu" left aligns with the title • "Memberships" right aligned to grey box	**2**	Any response must make reference to the **relationship** between **separate** items. Response must make reference to two examples of alignment Where candidates correctly annotate the graphic, reference to the type of alignment is not required in the written description.
		(ii)	**Depth:** • Layering of the black silhouette on top of the orange box • Layering of the body text on top of the orange silhouette • Transparency of the orange rectangle showing grey rectangle beneath. • Layering of the "scroll down for more" and orange down arrow. • Layering of "Up" over the runners beneath. Any other acceptable response	**2**	Any response must make reference to the **relationship** between **separate** items. Descriptions must make reference to obvious overlapping of two items.
		(iii)	**Contrast:** • Reference to two contrasting colours on the layout • Contrasting size of typeface • Contrasting size of runners • Contrasting size of rectangles • Contrasting size of arrows Any other acceptable response	**2**	Any response must make reference to the **relationship** between **separate** items.

Question			Expected response	Max mark	Additional guidance
	(c)		• Reach a wider audience. • Easier to edit. • Easier to share the website. • Website can be accessed anywhere. • Immediate updates to content can be made. • Animated effects, hyperlinks and videos can be embedded. • Social Media links can be added. • Portrays the company as being modern. • Websites can contain more information.	**2**	Any other acceptable answer. Do not accept any answer that makes reference to cost. Do not accept any answers that make reference to environmental impact.

Question			Expected response	Max mark	Additional guidance
2.	(a)		• **Extrude method:** • Correct profile with dimensions (1 mark) • Extrude 20mm (1 mark) • Fillet all four long edges 10mm (1 mark) • Sketch of dia15 circle and extrude by 12mm (1 mark) • Repeat on other side (1 mark) • Shell by 2.5mm and remove both faces (1 mark) • **Revolve method:** • Correct profile (dia20 circle) with centre axis with offset (1 mark) • Revolve 180 degrees (1 mark) • Dia 20mm circle AND extrude 45mm on both ends (1 mark) • Sketch of dia15 circle and extrude by 12mm (1 mark) • Repeat on other side (1 mark) • Shell by 2.5mm and remove both faces (1 mark)	**6**	• **Sweep method:** • Correct profile of dia20 circle (1 mark) • Correct path and starting point with dimensions (1 mark) • Extrude/sweep along a path (1 mark) • Sketch of dia15 circle and extrude by 12mm (1 mark) • Repeat on other side (1 mark) • Shell by 2.5mm and remove both faces (1 mark) Sweep method: Third bullet point - Do not accept only "sweep".
	(b)	(i)	15 mm	**1**	
		(ii)	100 mm	**1**	
	(c)		• Reduce the gauge/thickness of card • Reduce spacing between cards to reduce the amount of waste • Reduce excess/unnecessary material • Use sustainable inks • Use recycled card/paper • Use recyclable card/paper	**1**	Any other appropriate response relating to the environment

Question			Expected response	Max mark	Additional guidance
3.	(a)		• To explore ideas • To plan for 3D modelling • To show to the client • Should be quick to produce • To aid the development of ideas	**2**	
	(b)		• Scanner • Flatbed scanner • Graphics Tablet • Digital Camera	**2**	Accept camera. Do not accept "phone" or "tablet" without reference to the camera function
	(c)		Pictorial A: Isometric Pictorial B: Oblique	**2**	
	(d)	(i)	Align	**1**	Do not accept "flush" or any other software specific term.
		(ii)	• Centre axis • Mate	**2**	Any other correct constraint. Do not accept repetition of answer from d (i). Do not accept "flush" or any other software specific term.
	(e)		• Same components can be used repeatedly • No need to redraw/remodel repeated components • Less chance of errors • Speeds up production • Standardisation	**1**	
	(f)		Top right	**1**	
	(g)		• Better contrast • Larger images for readers to see at a distance • Icons are more universally understood • Toilet symbols for able bodied and disabled users are separate	**2**	Do not accept "easier to see"

Question			Expected response	Max mark	Additional guidance
4.	(a)	(i)	• Universal understanding • Simpler to follow • Layout becomes less cluttered • Allows images to be enlarged	**1**	
		(ii)	• No need for different versions in alternative languages • Speeds up production of the instruction manual	**1**	Do not accept answers related to printing cost.
	(b)		Any one from: • Make arrows outlines • Make arrows smaller • Less bolded text • Reduce page number size • Remove background images • Reduce page size	**1**	
	(c)		• Blue • Green • Yellow	**1**	Only accept these responses.
	(d)		• Blue • Red	**1**	Only accept these responses.
	(e)	(i)	Any two from: • Red • Blue • Yellow	**2**	Where a candidate states a non-primary colour in their response, a maximum of 1 mark can be awarded. Do not accept shades/tints of these colours.
		(ii)	• Suitable for children	**1**	
	(f)	(i)	Top right	**1**	
		(ii)	Bottom	**1**	

Question			Expected response	Max mark	Additional guidance
5.	(a)	(i)	Circle	**3**	1 mark for each correct response
		(ii)	Trim		
		(iii)	Fillet		
	(b)		Material **OR** texture	**1**	
	(c)		• Can test how the 3D model looks with different materials. • Complex forms can be achieved in 3D CAD/CADCAM. • Changes to the 3D model can be made easily/quickly. • Easy to re-make if issues identified. • Can be used with a variety of CAM processes. • Can test/simulate the model. • Helps to ensure accuracy of dimensions. • Can check if components assemble accurately. • Orthographic drawings can be generated from a 3D CAD model.	**2**	
	(d)		• Increase render settings • Higher resolution render • Improve lighting/shadows • Larger image output when rendering • File type choice • Edit the material texture	**1**	Do not accept ray tracing.
	(e)		One mark for each of; • Initial profile (correct shape showing slope) (1mark) • Centre axis and offset identified **(1mark)** • Revolve 360 (1mark)	**3**	Extrude approach • **Three** extruded cylinders (1mark) • Correct tapers identified on top and bottom cylinders (1mark) • Subtraction of hole (1mark)

Question			Expected response	Max mark	Additional guidance
6.	(a)	(i)	• **Large** "mars" heading (on all badges). • **Large** red area (in all badges).	**1**	
		(ii)	• Line used to create boundary on all badges. • Links with the planets/text in badge 1. • Three different line weights on badge 1 to create contrast. • Line leads your eye.	**1**	
		(iii)	• Repeated use of white elements • Line used in badge 1 to connect all planets • Repeated use of font in badge 1 • Repeated use of shapes in badges 1 and 2 • Repeated use of red in badge 2	**1**	Any response must make reference to the **relationship** between **separate** items. Candidates can make reference to one badge in isolation or compare unity across all 3 badges.
	(b)	(i)	Sans serif	**1**	
		(ii)	• Modern/futuristic typeface • Easy to read • Relevant to the context	**1**	Apply FO rule from b (i)
	(c)		• Flow text along a path • Reverse	**2**	Accept "Text along a path" Do not accept "Flow text"
	(d)		Top Row Left Middle Row Left	**2**	If a candidate ticks 3 boxes, 2 of which are correct, a maximum of 1 mark can be awarded. If a candidate ticks 3 boxes, 1 of which are correct, 0 marks must be awarded. If a candidate ticks 4 or more boxes, 0 marks must be awarded.
	(e)		Correct identification of: • Foot sleeve (1 mark) • Connecting pin (1 mark) • Retaining collar (1 mark) • Foot pad (1 mark)	**4**	Do not accept any identification on the Plan.

[END OF MARKING INSTRUCTIONS]