National Qualifications 2024

2024 Graphic Communication

National 5

Question Paper 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.

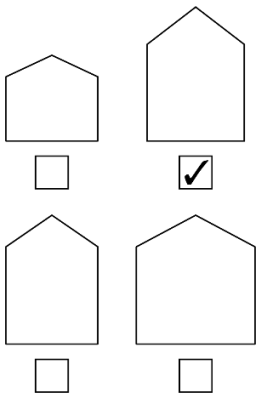
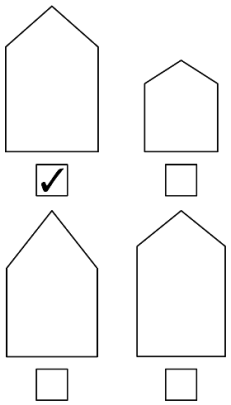
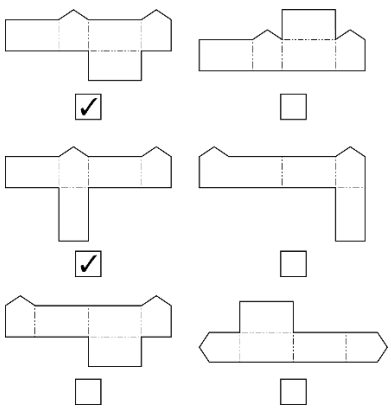
(b) If a candidate response does not seem to be covered by either the principles or detailed marking instructions, and you are uncertain how to assess it, you must seek guidance from your team leader.

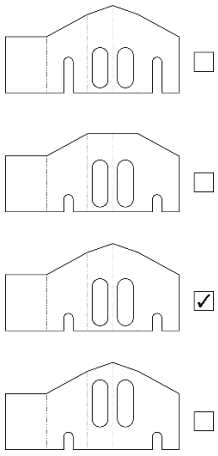
(c) For 'Describe' questions
Candidates must provide a statement or structure of characteristics and/or features, not just an outline or a list. For example they can refer to a concept, experiment, situation or facts in the context of and appropriate to the question. The number of marks available for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

Question			Expected response	Max mark	Additional guidance
1.	(a)	(i)	Top right 	**1**	
		(ii)	Top left 	**1**	
		(iii)	• Top left • Middle left 	**2**	

Question			Expected response	Max mark	Additional guidance
1.	(a)	(iv)	Second bottom 	**1**	
	(b)		• Fold line	**1**	Follow on rule to be applied if candidate has mixed up the fold line and centre line
			• Outline	**1**	
			• Centre line	**1**	
	(c)		5:1	**1**	
	(d)		• Use recycled/sustainable materials • Use materials that can be recycled • Environmentally friendly inks • Use less ink • Card gauge reduced • Fitting as many surface developments onto a sheet as possible	**2**	
	(e)		Any two of the following: • Parts are strong • Parts are light weight • Low cost per print/prototype • Materials can be low-cost • High level of accuracy • No waste materials • Continuous production • Variety of colours available • Product can be tested	**2**	Do not accept "cheap" on its own

Question			Expected response	Max mark	Additional guidance
2.	(a)		Any two of the following techniques: • Lighting • Material • Surface Texture	**2**	Do not accept colour Accept: Applying a decal – this is in the higher specification Accept texture
	(b)		Any two of the following: • Spacing between all parts/no overlapping parts • All parts are in view • Parts all aligned • Parts in correct order of assembly • Parts labelled	**2**	
	(c)		**Revolve method** • Profile for revolution, including dimensions **(1 mark)** • Centre axis identified **(1 mark)** • Revolve 360 degrees **(1 mark)** • 2D sketch of slot including dimensions and subtract **(1 mark)**	**4**	**Revolve and extrude method** • Profile for revolution, including dimensions **(1 mark)** • Centre axis identified and Revolve 360 **(1 mark)** • Sketch 20 dia circle on top face and extrude 12mm **(1 mark)** • 2D sketch of slot including dimensions and extrude-subtract **(1 mark)** **Loft method** • Sketch 100 dia circle and 60 dia circle offset by 80mm **(1 mark)** • Loft both circles **(1 mark)** • Sketch 20 dia circle on top face and extrude 12mm **(1 mark)** • 2D sketch of slot including dimensions and extrude-subtract **(1 mark)**
	(d)	(i)	Centre axis	**1**	Follow on rule should be applied where candidate has mixed up **Mate** and **Align** at (ii) and (iii)
		(ii)	Mate	**1**	
		(iii)	Align	**1**	

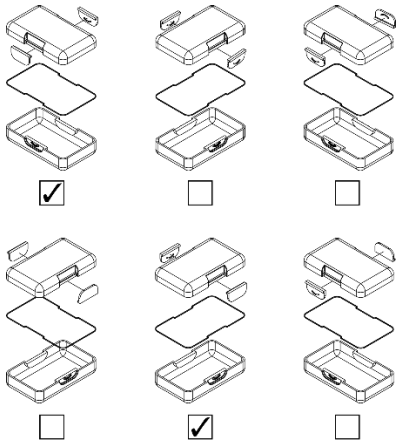
Question			Expected response	Max mark	Additional guidance
2.	(e)	(i)	• Create a 2D sketch of a circle on a face **(1 mark)** • Extrude the circle **(1 mark)**	**2**	
		(ii)	**Extrude method** • Create a 2D sketch of profile on a surface/workplane **(1 mark)** • Extrude the profile **(1 mark)** • Fillet the edge to create the curve **(1 mark)**	**3**	**Revolve method** • Create a 2D sketch of profile on surface **(1 mark)** • Revolve profile **(1 mark)** • 90 degrees **(1 mark)**
	(f)	(i)	• Chain	**1**	
		(ii)	• Parallel	**1**	Follow on rule
	(g)		To indicate the object has a square surface	**1**	Do not accept cubed
	(h)	(i)	Any of the following errors correctly identified: • Diameter 20 used instead of radius • Diameter 20 arrow not touching inside fillet arc • R2 used for chamfer • Centre mark missing from plan • Views not in third angle (plan is upside down) • Intersecting leader lines on vertical dimensions • Centre lines missing from Elevation • Repeat of Dia50 on the plan • Chamfer incorrectly sized missing 45deg • Missing dimension of small circle on the plan	**1**	Any four from the list provided Accept R10 or R20 for first bullet point
		(ii)		**1**	
		(iii)		**1**	
		(iv)		**1**	
		(v)	• Mirror • Line • Trim	**3**	Accept “mirror” only for first 2D CAD tool Do not accept “break”

Question			Expected response	Max mark	Additional guidance
3.	(a)		• Creates contrast against the background • Layering to create depth • Creates unity of colour (white) with "buy now" and/or "65%" • Biggest thing on the page creates dominance • Contrasts with the black circles Any other suitable response	**2**	
	(b)		• Reverse or Rotate	**1**	Accept sub-heading or Sans Serif
			• Text wrap	**1**	
			• Drop shadow	**1**	
	(c)		• Sans serif is modern, tying in with the theme/brand • Informal • Easy to read • Appeals to the target audience • Matches the simple design of the graphic	**1**	
	(d)		Response may include: • Colour matching • Layering • Bleed • Shape • Cropping • Extended text • Text wrapping • Importing of Images Any other acceptable response	**4**	Candidates must refer to features within the layout. For example: • **Colour matching** has been used to ensure watch strap and shape/circles are the same colour **(1 mark)** • Various elements, for example watch and STEP UP, have been **layered** **(1 mark)** • Speeds up production **(0 marks)**
	(e)		Contextualised descriptions of any of the following: • Videos • Animations • Weblinks • Sounds	**3**	For example: • Hyperlink has been added to take a customer directly to website to purchase **(1 mark)** • Do not accept a repeated description, ie, link to video for more information **(1 mark)** and a link to social media page for more information **(0 marks)**

Question			Expected response	Max mark	Additional guidance
3.	(f)	(i)	Pie chart	**1**	
		(ii)	• Shows percentages • Shows parts of a whole • All segments add up to 100%	**1**	Follow on should be applied, if wrong graph stated in (f)(i)
	(g)	(i)	Line graph	**1**	
		(ii)	• Shows trend/change over time • Can help make predictions for future data	**1**	Follow on should be applied, if wrong graph stated in (i) Do not accept generic statements such as "easy to read"
	(h)	(i)	Bar graph	**1**	
		(ii)	Easy to **compare data**	**1**	Follow on should be applied, if wrong graph stated in (i)

Question			Expected response	Max mark	Additional guidance
4.	(a)		• Easy for non-specialists to understand • Colours/materials/textures are shown • They look realistic	**2**	Do not accept 'what it looks like in real life'
	(b)		**Extrude from Elevation approach** • 60x30 sketch including R15 fillets, extruded by 4mm **(1 mark)** • Correct side profile with dimensions and extrusion **(1 mark)** • Dia 2 circle sketch and subtraction **(1 mark)** **THEN** • Sketch of arc shape with dimensions and extruded by 2mm **(1 mark)** • 1mm fillet added to arc feature **(1 mark)** **OR** • Correct 2D sketch profile (detail b) with dimensions included **(1 mark)** • Revolve 90 degrees **(1 mark)**	**5**	**Extrude from Section A-A approach** • 2D sketch of end elevation profile with dimensions **(1 mark)** • Extrude profile by 60 **(1 mark)** • Fillet of 15mm added to both corners **(1 mark)** **THEN** • Sketch of arc shape with dimensions and extruded by 2mm **(1 mark)** • 1mm fillet added to arc feature **(1 mark)** **OR** • Correct 2D sketch profile (detail b) with dimensions included **(1 mark)** • Revolve 90 degrees **(1 mark)**
	(c)	(i)	• Overlapping of "SHOOTS" with black elements below • Transparency added to "SHOOTS" revealing black elements below • Line under extended text passes underneath red bamboo and sticker • Black sticker layered above the red bamboo images • Small fold on the black sticker gives the illusion of depth	**2**	Any response must make reference to the **relationship** between **separate** items

Question			Expected response	Max mark	Additional guidance
4.	(c)	(ii)	• Repeated use of red for heading, bamboo images and text on the sticker • Repeated use of 4 food icons • Repeated use of black across multiple elements • Repeated use of sans serif font • Line connects extended text to graphics on the left side of the layout	**2**	Any response must make reference to the **relationship** between **separate** items
		(iii)	• The word 'Shoots' is aligned centrally with the icons in the background • The text on the sticker is centrally aligned with the sticker • The sticker is centrally aligned with the extended text • The extended text and the 'sushi roll icon' are aligned to the right vertically • The 4 icons at the bottom of the page are centrally aligned. • The text within the black circle is horizontally aligned with the sub-heading text • Individual graphics of food behind 'Shoots' are horizontally/vertically aligned	**2**	Any response must make reference to the **relationship** between **separate** items Response must make reference to two examples of alignment Where the candidate correctly annotates the graphic, reference to the type of alignment is not required in the written description
		(vi)	• Horizontal lines used to draw attention to the extended text • Horizontal line passes behind the graphics on the left creating depth • Horizontal lines help to create structure • Line is used to separate/divide elements • Line is used to connect body text to graphics to the left	**2**	

Question			Expected response	Max mark	Additional guidance
4.	(d)	(i)	62mm	**1**	
		(ii)	25mm	**1**	
		(iii)	90mm	**1**	
		(vi)	72mm	**1**	
		(v)	200mm	**1**	
	(e)	(iii)	Top left Middle bottom 	**2**	

[END OF MARKING INSTRUCTIONS]