CAMBRIDGE
International Education

Cambridge International AS & A Level

INFORMATION TECHNOLOGY **9626/04**

Paper 4 Advanced Practical **February/March 2026**

MARK SCHEME

Maximum Mark: 90

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the February/March 2026 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Task	Answer	Marks
1	**DataTask**	
1(a)(i)	1990 chart created	**1**
	2020 chart created	**1**
	2010 chart created	**1**
	2020 chart created	**1**
1(a)(ii)	All charts correctly titled centrally and in the correct order	**1**
	All charts have 4 regions (bars) only	**1**
	All 4 charts region labels are angled correctly and fully visible	**1**
	All charts have no category axis titles and no field buttons	**1**
1(a)(iii)	The value axis of all charts is set at 300 000 000	**1**
	The vertical axis is correct on all charts	**1**
1(a)(iv)	All charts are consistently formatted	**1**
	All charts have blue bars and a yellow plot area	**1**
	All charts have horizontal value lines	**1**
	All chart have a light blue chart area	**1**
1(a)(v)	The 4 charts are shown on a dashboard with a blue background and the correct title	**1**
	All (4) charts are the same size and with evenly spaced gaps	**1**
	All charts align horizontally. Their tops and bottoms are in line	**1**
1(b)(i)	Pie chart is created with 4 correct sectors	**1**
	The background of the pie chart matches the background of the bar charts	**1**
	The pie chart sectors are coloured appropriately	**1**
	All labels for the sectors are external and shown in correct positions	**1**
1(b)(ii)	The Year selector is shown and is the only selector	**1**
	The chart changes correctly for the year selected	**1**
	The pie chart title changes for the year selected	**1**
	The Pie chart is shown on the dashboard and is the same width as the bar charts	**1**

Task	Answer	Marks
1(c)(i)	A Worldwide sales chart is created with the correct title	**1**
	The chart is shown on the dashboard and formatted to match the bar charts. The years are shown on the category axis and angled correctly	**1**
1(c)(ii)	There is evidence of the data used for the chart. The worldwide totals for all years must be shown	**1**
	Only the data for the worldwide totals must be extracted and shown in a table for all years. No region totals must be shown in the table	**1**
	A valid (non-manual) method must be used for the extraction of only the Worldwide totals	**1**
	The values shown in the table must be correct	**1**
1(d)	A chart for the 10 year Rolling Average must be shown on the dashboard and match the format of the bar charts with a yellow-blue gradient The category axis must show the intervals angled correctly and be fully visible	**1**
	The formula for the rolling average must be replicable and display the correct values	**1**
	The correct intervals must be shown on the category axis	**1**
	A replicable formula for must be used to create the correct intervals for the axis	**1**

Task	Answer	Marks
2	**GraphicsTask**	
2(a)(i)	The Chip and ChipPlus images are both svg with transparent backgrounds	**1**
	Both images can be disassembled revealing no bitmap elements	**1**
2(a)(iii)	The shape, perspective and proportions of the case is correct	**1**
2(a)(iii)	The complete chip image is complete and has the correct dimensions	**1**
	The chip image has no extra 'whitespace’	**1**
2(a)(iv)	The chip image is angled within an set tolerance	**1**
	The chip image is angled precisely	**1**
2(a)(v)	All elements of the chip image fit together precisely	**1**
	All colours and gradients in the chip case are correct	**1**
2(a)(vi)	The cutback in the top of the chip is an even shape, fitted precisely and without outlined sections	**1**
	The cutout gradient is light – dark grey without discernible sections	**1**
	The depth of the cutout matches that provided in the source file.	**1**
2(a)(vii)	The image provided – ChipLeg.svg is undistorted	**1**
	The colour and gradients of the ChipLeg image are preserved	**1**
2(a)(viii)	There are 8 copies of the ChipLeg image fitted to the casing – all are vertical and the same size	**1**
	The shoulders of all of the ChipLeg images are fitted to the casing precisely and are regularly spaced	**1**
	The lower part of a single leg is visible at rear of the chip casing	**1**
	The orientation, angle, position and depth of the lower part of the single rear leg matches that provided in the source file	**1**
2(a)(ix)	The processor patch in the chip is the correct size and positioned correctly	**1**
	The processor patch is rectangular/rhomboidal and matches the size and perspective shown in the source file	**1**
	The processor patch has an internal rectangle	**1**
	The colours and alignments of the processor patch sections match those of the source file	**1**

Task	Answer	Marks
2(a)(x)	There are connections drawn from the processor patch to each of front legs	**1**
	All connections only touch the processor patch and the front legs	**1**
	The are 8 connections to the (hidden) rear legs	**1**
	The are 4 connections to each face of the processor patch	**1**
2(a)(x)	Complete chip fits template horizontally	**1**
	Chip fits template vertically	**1**
	Chip is angled within test shape limits – Size within tolerance	**1**
	Chip is angle precisely – all legs touch guide equally	**1**
2(b)	A realistic 'notch' is created and is in proportion to that shown in the question paper – the dot is added	**1**
	The base of the notch base is parallel to the chip casing	**1**
	The cutout of the notch is smoothly curved and fits accurately	**1**
	The notch cutout has a white-grey gradient	**1**

Task	Answer	Marks
3	**Animation**	
3(a)(i)	The frame of the animation is set to 500px by 400px	**1**
	The CircuitBoard.png image is set as the background and fits the frame precisely	**1**
	The ANDGate.png image is overlaid as shown in the question paper	**1**
3(a)(ii)	Both streams of digits only move left/right smoothly at a constant (countable) speed	**1**
	Both streams and are static vertically – the background must also be static	**1**
	Both streams are accurately centred	**1**
	The streams are synchronous	**1**
3(a)(iii)	Stream1 is masked precisely	**1**
	The mask for Stream2 matches the mask for Stream 1 or is precise	**1**
3(a)(iv)	Both streams are visible at all times	**1**
3(a)(v)	The output number always changes at the correct time	**1**
	The output number is centred	**1**
	The output number is static	**1**
	The output number 1 is a different colour	**1**
3(a)(vi)	The animation loops continuously without a discernible restart	**1**

Task	Answer	Marks
4	**JavaScript**	
4(a)(i)	A JSTask folder is created All the correct files are added to the folder The HTML page loads with the correct background and image	**1**
4(a)(ii)	There is evidence that additional code has been entered	**1**
4(a)(iii)	Both input boxes have been restricted to a selection of 0 or 1	**1**
	Selection of the values in the input boxes always gives the correct results	**1**
4(a)(iv)	The <script></script> tags are placed in head or body sections of the HTML A function named calculateAND( ) is created	**1**
	Variables for inputs 1 and 2 are declared	**1**
	The .value property is used for each variable	**1**
4(a)(v)	document.getElementById ("output").value (not .innerHTML) is used to display the results	**1**
4(a)(vi)	Valid conditional statements are used to compare the input values	**1**
	Valid logical and equality operators are used to determine the output value	**1**

