

# Cambridge International AS & A Level

# INFORMATION TECHNOLOGY Paper 4 Advanced Practical 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 2025 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(a)	Worksheet renamed as 2025Data Column labels formatted correctly, labels and data centred.	2
	New worksheet named 2025 Analysis, Dropdown menu created with correct 3 options -Label and Menu formatted correctly and all selections fit cell	
1(b)	Valid method to show selected data	2
	Data changes on selection	
1(c)	Entire column displayed	4
	Correct data 1	
	Correct data 2	
	Correct data 3	
1(d)	New Tables in D2:F7	2
	Labels correct, labels and data centred	
1(e)	Marks interval dropdown, Restricted to 5 or 10 with Suitable error message	1
1(f)	Formula for Lower limit	3
	Selection works for lower limits	
	Blanks for out of range	
1(g)	Formula for Upper limit	3
	Selection works for Upper limits	
	Blanks for out of range	
1(h)	Formula for Range	4
	Correct format for Range	
	Selection works for Range	
	Blanks for out of range	
1(i)	Frequency column added	3
	Attempt for formula	
	Valid attempt	
1(j)	Use of COUNTIF(S)	3
	Use of COUNTIFS()	
	Correct results for frequency	

Task	Answer	Marks
1(k)	Chart created	3
	Selection works	
	Horizonal Axis title and labels	
1(I)	Correct format for title and labels	2
	Vertical Axis title and labels with correct formatting	
1(m)	Gridlines dark	3
	Plot area yellow	
	Columns blue	

Task	Answer	Marks
2(a)	Piece is 80 mm wide	2
	80 mm tall	
2(b)	Cutout depth approx 12 mm	5
	Extrusion depth approx 12 mm	
	Cutout width approx 20 mm	
	Extrusion width approx 20 mm	
	Cutout and extrusion central	
2(c)	4Pieces image saved as .png	4
	Top Horizontal and Bottom Horizontal joints ok	
	Left vertical joint and Right vertical joints ok	
	Top and Bottom lines contiguous	
2(d)	Left and Right lines contiguous	1
2(e)	Assembled with 4 joints accurate	1

Task	Answer	Marks
2(f)	TierPiece1 created saved as .png	3
	1 quarter of the image	
	Correct quarter	
2(g)	Clear cut	3
	Straight lines	
	Smooth curve cutout	
2(h)	Smooth curve extrusion	2
	TierPiece2 created saved as png	
2(i)	1 quarter of the image	2
	Correct quarter	
2(j)	TierPiece3 created saved as a .png	2
	1 quarter of the image	
2(k)	Correct quarter	2
	TierPiece4 created saved as a s.png	
2(I)	1 quarter of the image	4
	Correct quarter	
	Complete fit 4 pieces	
	Reasonable fit 2 pieces	
2(m)	Whole image Assembled saved as 4Pngs.png	2
	Image intact	

Task	Answer	Marks
3(a)	Piece 1 enters	5
	Piece 2enters	
	Piece 2 fits piece 1	
	Piece 3 enters	
	Piece 3 fit piece2	
3(b)	Piece 4 enters	5
	Piece 4 rotates	
	Piece 4 fits piece 3	
	Piece 5 enters	
	Piece 5 fits piece 4	
3(c)	Piece 6 enters	5
	Piece 6 rotates	
	Piece 6 fits piece 5	
	Piece 7 enters	
	Piece 7 fits piece 6	
3(d)	Piece 8 enters	5
	Piece 8 fits piece 7	
	Piece 8 fits piece 1	
	Piece 9 fades in	
	Piece 9 fits vertically and horizontally	
3(e)	Correct text shown	2
	Text grows smoothly and to the correct size	