

# Cambridge International AS & A Level

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**INFORMATION TECHNOLOGY****9626/04**

Paper 4 Advanced Practical

**February/March 2025****MARK SCHEME**Maximum Mark: 90

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**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.

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This document consists of **6** printed pages.

**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                                                                                                                   |       |

| <b>Task</b> | <b>Answer</b>                                          | <b>Marks</b> |
|-------------|--------------------------------------------------------|--------------|
| 1(k)        | Chart created                                          | <b>3</b>     |
|             | Selection works                                        |              |
|             | Horizontal Axis title and labels                       |              |
| 1(l)        | Correct format for title and labels                    | <b>2</b>     |
|             | Vertical Axis title and labels with correct formatting |              |
| 1(m)        | Gridlines dark                                         | <b>3</b>     |
|             | Plot area yellow                                       |              |
|             | Columns blue                                           |              |

| <b>Task</b> | <b>Answer</b>                                    | <b>Marks</b> |
|-------------|--------------------------------------------------|--------------|
| 2(a)        | Piece is 80 mm wide                              | <b>2</b>     |
|             | ... 80 mm tall                                   |              |
| 2(b)        | Cutout depth approx 12 mm                        | <b>5</b>     |
|             | Extrusion depth approx 12 mm                     |              |
|             | Cutout width approx 20 mm                        |              |
|             | Extrusion width approx 20 mm                     |              |
|             | Cutout and extrusion central                     |              |
| 2(c)        | 4 Pieces image saved as .png                     | <b>4</b>     |
|             | 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                  | <b>1</b>     |
| 2(e)        | Assembled with 4 joints accurate                 | <b>1</b>     |

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

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