Cambridge Assessment International Education

Cambridge International AS & A Level

INFORMATION TECHNOLOGY **9626/04**

Paper 4 Advanced Practical **October/November 2023**

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 October/November 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **7** 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 descriptors 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	CastleLayer saved in any format – allow any case and typos for all 3 images.	**1**
	OceanLayer saved in any format.	**1**
	SkyLayer saved in any format.	**1**
	3Layer image saved must be in a bitmap format.	**1**
	Castle – the whole and full width must be visible.	**1**
	Castle – the whole and full height must be visible.	**1**
	Castle – all details must be visible and the roof details cleanly cut.	**1**
	Left side of the castle – the edges must be cut-out cleanly.	**1**
	Right side of the castle – the edges must be cut-out cleanly.	**1**
	All wall edges must be cleanly cut out.	**1**
	Ocean layer – must be intact and fill the castle gap horizontally.	**1**
	Ocean layer – must display only ship – no foliage must be visible.	**1**
	Ocean layer – must be the correct height – as shown in the QP.	**1**
	The ship must be horizontally positioned as shown in the QP (approximately).	**1**
	The ship must be vertically positioned as shown in the QP (approximately).	**1**
	The ship must be a similar size to that shown in the QP.	**1**
	The sky layer must fill the gap – including the left roof details.	**1**
	The sky layer must meet the Ocean layer cleanly.	**1**
	The sky layer must be intact and fill to the top of the image.	**1**
	The sky layer clouds must show as in the QP - as one unedited image.	**1**
		[20]

Task	Answer	Marks
2 Data Base	Customer data is imported (can be just account holders - if all test for 43 accounts).	**1**
	April_Orders data is imported; April_Owed field must be formatted as Currency.	**1**
	1st_quarter_accounts data is imported.	**1**
	All Cust ID, Jan, Feb, Mar, amounts are complete.	**1**
	All month data is formatted as currency	**1**
	The March *Unpaid* accounts are identified.	**1**
	The correct 5 unpaid records identified (Bhar,Ebla,Gwoo, RCoo, Twin).	**1**
	An April account sum field is created – must be calculated in the database.	**1**
	All the April account sums are correct – Acar=£212.70, BAus=£45.75, BHar=£54.95 …..	**1**
	A source with combined evidence for account holders only is created in the database.	**1**
	The source contains a March sum/owed field.	**1**
	The March Paid/Unpaid evidence is included in the source.	**1**
	A Sum of the April orders for each customer included in the source.	**1**
	A field for the total of April and March amounts (Outstanding) field is created.	**1**
	There are 5 Unpaid Outstanding totals for March+April. £117.99, £315.09, £267.69, £82.39, £272.79	**1**
Mail Merge document.	F2uFmergedoc_ is saved – a source requested when opened.	**1**
	The date format is correct and –Title(space)Forename(space)Surname mergefields are inserted.	**1**
	Mergefields for – Address lines (1 field per line), Salutation, Forename and Account ID are inserted.	**1**
	Conditional field(s) are used.	**1**

Task	Answer	Marks
Merged letters for March	There are only 5 letters with the correct text for the amounts included.	**1**
	Bethany Harrison – March £63.04, April £54.95, Total £117.99	**1**
	Ewan Black – March £132.34, April £182.75, Total £315.09	**1**
	Gabriel Woods – March £54.94, April £212.75, Total £267.69	**1**
	Robert Cooper – March £27.45, April £54.94, Total £82.39	**1**
	Tegan Winter – March £56.74, April £216.05, Total £272.79	**1**
Merged letters for April accounts over £300	There are only 4 letters with the correct text for the amounts included.	**1**
	Ewan Chan – Your April bill is £336.15 …..	**1**
	Freddie Walters – Your April bill is £300.05 …..	**1**
	Niamh Barnett – Your April bill is £427.20 …..	**1**
	Sarah Buckley – Your April bill is £355.95 …..	**1**
		[30]

Task	Answer	Marks
3	The frame size must be 640px × 480px	**1**
	The HarbourView image must be complete.	**1**
	There must be a pause before the animation starts – 0.5 seconds.	**1**
	The viewer must appear from the bottom left of the image.	**1**
	The viewer must be circular – it must not be solid, must move and must not distort.	**1**
	….the viewer must be the correct size as shown in the QP.	**1**
	… the viewer ring must be as shown in the QP.	**1**
	The HarbourView image must appear dimmed but not obscured.	**1**
	… the viewer circle must show the undimmed image at all times.	**1**
	The viewer must travel a smooth 6 stage path.	**1**
	The 6 second movements must be at a constant speed.	**1**
	All of the HarbourView Image must be constantly static and dimmed.	**1**
	… the viewer must constantly be clear with a marked difference in the view.	**1**
	The path of the viewer must finish on the Light house.	**1**
	The viewer must appear to zoom in on lighthouse – smoothly.	**1**
	The zoom must take 2 seconds.	**1**
	The viewer must zoom to the centre of frame – it must be the original viewer.	**1**
	The zoomed viewer must fill the frame vertically and remain undistorted.	**1**
	The animation must be saved as an animated gif …	**1**
	… the animation must not loop.	**1**
		[20]

Task	Answer	Marks
4	Test with values – 45 10 2 – the calculation is correct (11.99.. or 12)	**1**
	Any result is rounded to a maximum of 1 decimal place.	**1**
	The correct text - 'The height of the tree is…. metres' is displayed.	**1**
	A refresh button is added to the webpage.	**1**
	The button shows suitable text e.g. 'Click to enter new data'.	**1**
	The data is cleared when the button is clicked …	**1**
	… the next calculation works. -ft	**1**
	The `<script src="  "></script>` tags are used ….	**1**
	The `<script src="TH.js"></script>` tags are shown in the head or the body. The filenames must match.	**1**
	The `calculate()` function has been amended. (any additional code - must be between <script> tags)	**1**
	A variable for the height of tree is created. (or is the result of a function)	**1**
	The *viewheight* input is referenced in the code.	**1**
	The *distance* input is referenced in the code.	**1**
	The **`.value`** operator is used for viewheight and distance references.	**1**
	The is evidence of the *distance * AngleFactor* calculation.	**1**
	The *Treeheight Result* bookmark is used.	**1**
	`document.getElementById("Treeheight Result")` is used in the code.	**1**
	A valid method for rounding the result to a maximum of 1 decimal place is used. (`Math.round( )` or other valid method is seen).	**1**
	A function to clear the data is created.	**1**
	A valid method to clear the data is used. e.g. the *angle, distance* and *viewheight* variables are set to "" or `window.location.reload` is seen.	**1**
		[20]