

### 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 May/June 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

## Cambridge International AS & A Level – Mark Scheme **PUBLISHED**

#### **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
	- Spreadsheet e file <b>AprilBakerySales_</b>	
1(a)	There is reference to the Products table for tax calculations in the formulas	3
	The formula refers to column 4 for tax values	
	The formula refers to column 3 for item prices	
1(b)	The formula uses Partial reference to C\$1 for replication purposes	2
	The formula uses Absolute reference to the products table data \$A\$2:\$D\$10	
1(c)	The Formula replicates both horizontally and vertically	1
1(d)	The correct values for taxed items are seen (Almond Delight, Brandy Snap, Ginger Fancies)	2
	The correct values for the untaxed items are seen	
1(e)	There is a valid method for calculating the company totals	2
	The correct values for order Totals are seen	
Total mai	Total marks	
` ,	– Database and invoices e files <b>April_Invoices_</b>	
1(a)	The database created and named correctly	1
1(b)	Only 4 monthly accounts are seen DNAN, DACI, SLEH, KATK	2
	Only 4 pages are seen - one page for each company	
1(c)	The DocHeader image and Bank Details are used in the header and footer respectively	2
	The invoice title is correct	
1(d)	The For label is correct, with Name and the address is inserted correctly for every company	3
	The Tel_Number label is correct, and the correct field and Tel_Number is shown	
	Dividing lines are inserted before main body of receipt and under the table	
1(e)	The Account_id label is correct, and the correct field is inserted	4
	The Date label is correct, and the correct field is inserted	
	The Order_id label is correct, and the correct field is inserted	
	The order Total label is correct, and the correct field is inserted	1

Task	Answer	Marks
1(f)	Account_id, Date, Order_id and order Total fields are aligned correctly	1
1(g)	The final Total label is correctly placed	2
	The totals are correct: DNAN = 1608.19 - DACI =1912.71 - SLEH=2224.02 - KATK=2173.68	
1(h)	The formatting and layout of the report is correct	1
1(i)	The reports are exported to a single .pdf file	4
	Each Invoice is on a single page	
	Four complete orders are shown on each company The dates are in ascending order	
	No shading or boxes are shown	
Total marks		20
	– Mail merge letters files <b>AprilMergeDoc_</b> and <b>April_Letters_</b>	
1(a)	AprilMergeDoc file is saved and prompts for a data source	2
	Date as field in d-MMM-yy format	
1(b)	The company_name and address fields are inserted	3
	The Account_id and Date fields are inserted, and formats are correct	
	Contact person IF = Unknown - "" - conditional field is inserted	
1(c)	The address Block and statement block formatting is correct	2
1(d)	An IF conditional field is inserted after message start "Dear"	
	The =Unknown - Customer else - First_Name - Criteria is correct	1
1(e)	An IF Sum_Outstanding conditional field is inserted	4
	The <> "" comparison criteria is correct	
	The Correct Orders in April text is inserted	
	The <april total=""> field is inserted</april>	
1(f)	Only Karma Café and Roberts Patisserie both receive one Outstanding sum letter	3
	Karma Café – Your orders in April amount to £2094.93	
	Karma Café – but unfortunately you have £427.39	

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Task	Answer	Marks
1(g)	Robert's patisserie – Your orders in April amount to £2164.87	2
	Robert's Patisserie – but unfortunately you have £383.59	
1(h)	Karma and Roberts get one letter each and are the only two to get the 'outstanding' letter " - still to pay. Please remit this amount as soon as possible. We reserve the right to refuse future orders."	2
	Both letters are in £ with 2dp and all spacing correct	
1(i)	Only House Roasts, Ruby's Café, Rare Grounds, Blend Restaurant, Lead Foods, East End Catering and Cappuccino Place receive the 'Offer' text letter	2
	With the text " As a customer whose monthly orders often total more than £2000, we are pleased to offer you a monthly account that you can use to order and pay for our products on-line."	
1(j)	All nine letters are fit for purpose	1
Total marks		22

Task	Answer	Marks
	/ector graphic image e files WholeCake_ and SlicedCake_	
2(a)	The cake is not flat topped with a symmetrical 'dome'	2
	There is a discernible orange gradient in the top layer	
2(b)	The red band width and gradient have suitable proportions	2
	The red band fits – both joints are clean	
2(c)	The brown base height and gradient have suitable proportions	2
	The joint of the brown base with plate is clean	
2(d)	The cake is placed centrally on plate	3
	The plate shape, size and colour are suitable	
	The plate appears to have suitable depth and contours	
2(e)	The left candle is cylindrical, Green with a lighter (not sharp flat) top	3
	The right candle is cylindrical, Blue with a lighter (not sharp flat) top	
	The flames have tear-drop shape, red outline, orange fill and are a suitable size	
2(f)	The text and the path are correct	2
	The text appears to be raised	
2(g)	The left slice top joints, shape and colour are accurate	4
	The left slice red band joints, shape and colour are accurate	
	The left slice brown base joints shape and colour are accurate	
	Left sliced areas are darker	
2(h)	The right slice top joints, shape and colour are accurate	3
	The right slice red band joints, shape and colour are accurate	
	The right slice brown base joints shape and colour are accurate	
2(i)	The plate area is repaired	2
	The plate repair area is invisible	
Total marks		23

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Task	Answer	Marks
Task 3 – / Candidate	Animation e file CakeMessage_	
3(a)	The animation is saved as a $640 \times 480$ animated gif	1
3(b)	The CakeBase image is used as the background – the colours are preserved	4
	The background fits frame and is static	
	"Your message here" is in a grey serif font and is always visible	
	The text is central horizontally, static and correct size/proportions	
3(c)	There is a pause before the animation begins – Text is not white at the start	1
3(d)	The white text fills completely in 2 seconds	4
	The white text fills incrementally - not whole letters at a time	
	The white fills the text smoothly	
	The Red text animation starts after 1 second	
3e)	The red text fills completely in 2 seconds	4
	The red text fills incrementally – not whole letters at a time	
	The red fills the text smoothly	
	The red and white animations are the same speed	
3(f)	The animation restarts seamlessly	1
Total marks		15