

Cambridge International AS & A Level

INFORMATION TECHNOLOGY**9626/02**

Paper 2 Practical

May/June 2024

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.

This document consists of **8** 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
Task 1 – Database Candidate file evidence_		
1(a)	<p>Conceptual ERD</p> <p>has no data types</p> <p>has no key fields</p> <p>has no field lengths</p> <p>is drawn with rounded rectangles</p>	4
1(b)	<p>Entity count</p> <p>3 entities created</p>	1
1(c)	<p>Entity names</p> <p>Entity names positioned at top ...</p> <p>... named Stock or equivalent</p> <p>... named Order or equivalent</p> <p>... named Customer or equivalent</p>	4
1(d)	<p>Stock entity</p> <p>Short attribute/field names with no spaces</p>	1
1(e)	<p>Order entity</p> <p>Short attribute/field names with no spaces</p> <p>Extra ID field to be used for index</p>	2
1(f)	<p>Customer entity</p> <p>Short attribute/field names with no spaces</p>	1
1(g)	<p>Linked entities</p> <p>Links shown between entities ...</p> <p>... Stock – Order (1 to many)</p> <p>... Customer – Order (1 to many)</p>	3

Task	Answer	Marks
Task 2 – Data dictionary Candidate file evidence_		
2(a)	<p>Table identified</p> <p>Appropriate table name selected e.g. Stock</p>	1
2(b)	<p>Stock code field</p> <p>StockCode or ProductID or similar with no space</p> <p>... data type is alphanumeric</p> <p>... length is 8 characters</p> <p>... input mask is identified as 2 letters and 6 digits</p> <p>... set as primary key</p>	5
2(c)	<p>Style, Item, Metal and Stone Field</p> <p>Style, Item, Metal and Stone fields as alphanumeric</p> <p>Style field input mask is identified as 1 letter and 2 digits</p>	2
2(d)	<p>Stock Held and Stock Ordered fields</p> <p>StockHeld and StockOrdered or similar with no spaces</p> <p>... data type is numeric for both ...</p> <p>... as integer for both</p>	3
2(e)	<p>Field lengths</p> <p>Style – length 3 characters</p> <p>Item – length 9 characters</p> <p>Metal – length 8 characters</p> <p>Stone – length 10 characters</p>	4
2(f)	<p>Price fields</p> <p>Both price fields with currency data type</p> <p>... with 2 decimal places</p>	2
2(g)	<p>Validation rules</p> <p>Validation rule of ≥ 0 applied to one of the stock held, stock ordered, cost price or sale price fields ...</p> <p>... applied to all 4 of these fields</p>	2

Task	Answer	Marks
2(h)	Validation rules	4
	Item validated for list of 5 items	
	Metal validated for list of 3 items	
	Stone validated for list of 6 items ...	
	... and includes a Null string	

Task	Answer	Marks
Task 3 – Relational database Candidate file jewel_		
3(a)	Stock table	6
	Table and field names match data dictionary	
	Data types match data dictionary	
	Field lengths match data dictionary	
	Primary key matches data dictionary	
	Input masks match data dictionary and works	
	Validation rules match data dictionary	
3(b)	Order table	2
	Appropriate table name selected e.g. <u>Order</u>	
	Field names short, meaningful and no spaces	
3(c)	Order table ID	2
	ID field added	
	New field set as primary key	
3(d)	Order table other	3
	3 numeric fields set as integers	
	Date set as Date/Time in dd/mm/yyyy format	
	PreparedBy and Item set as alphanumeric	
3(e)	Customer table	2
	Appropriate table name selected <u>e.g. Customer</u>	
	Field names short, meaningful, no spaces	

Task	Answer	Marks
3(f)	CustNo CustNo set as primary key CustNo set as integer	2
3(g)	Other fields Other 6 fields set as alphanumeric	1
3(h)	Relationship StockCode to Order.Item Single relationship created between StockCode to Order.Item is 1 to many relationship with NO referential integrity enforced	4
3(i)	Relationship Customer.CustNo to Order.CustNo Single relationship created between Customer.CustNo to Order.CustNo is 1 to many relationship with referential integrity enforced	4

Task	Answer	Marks
Task 4 – Data entry Form Candidate file <u>jewel</u>		
4(a)	Naming and Title Data entry form created for stock table ... with appropriate form name e.g. Stock/frmStock with no space(s) ... with appropriate title	3
4(b)	Instructions Data entry form created with instructions on form completion	1
4(c)	Fields Data entry form contains all fields from their stock table with appropriate labels, field sizes, layout and white space	2

Task	Answer	Marks
Task 5 – Audio Candidate file <u>left</u> _		
5(a)	<p>Left start</p> <p>Silence only removed from the start of the clip ...</p> <p>... music now starts in first second of the clip</p>	2
5(b)	<p>Left speed</p> <p>Speed of whole track slowed ...</p> <p>... to $0.5 \times$ original speed</p>	2
5(c)	<p>Left mono</p> <p>Track mixed down from stereo to mono</p>	1
5(d)	<p>File Export</p> <p>Exported in <u>mp3</u> format with correct file name <u>left</u>_ ...</p> <p>... and with track title set to <u>left</u></p>	2
Task 5 – Audio Candidate file <u>right</u> _		
5(e)	<p>Amplification</p> <p>Amplification reduced to 0.25 of the maximum volume</p>	1
5(f)	<p>File Export</p> <p>Exported in <u>ogg</u> format with correct file name <u>right</u>_</p>	1

Task	Answer	Marks
Task 6 – Audio Candidate file <u>voice</u> _		
6(a)	<p>Voice edit</p> <p>Clip has reverb added</p> <p>Voice starting after 10 seconds</p>	2
6(b)	<p>File export</p> <p>Exported in <u>mp3</u> format with correct file name <u>voice</u>_</p>	1

Task	Answer	Marks
Task 7 – Audio Candidate file <u>jewel_</u>		
7(a)	<p><i>Left track</i></p> <p>Left track fades out between 5 and 10 seconds</p> <p>Left track muted between 10 and 18 seconds</p> <p>Left track fades in between 18 and 23 seconds</p>	3
7(b)	<p><i>Left track voice and right track</i></p> <p>Left track voice added after 10 seconds</p> <p>Correct file used (from step 5) for right track</p>	2
7(c)	<p><i>Clip end</i></p> <p>2 second fade out at 25 seconds and clip ends at 27 seconds</p>	1
7(d)	<p><i>File export</i></p> <p>Exported in <u>mp3</u> format with correct file name <u>jewel_</u></p>	1