Cambridge International AS & A Level

INFORMATION TECHNOLOGY **9626/04**

Paper 4 Advanced Practical **For examination from 2022**

MARK SCHEME

Maximum Mark: 90

Specimen

This document has **10** pages. Blank pages are indicated.

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
	See Task 1 below for examples of graphics.	
1	**Customer table** Correct and consistently presented field names	1
	Correct data types	1
	Appropriate field sizes (not defaults)	1
	Appropriate primary key identified	1
	Artist table Correct and consistently presented field names	1
	Correct data types	1
	Appropriate field sizes (not defaults)	1
	Appropriate primary key identified	1
	Artwork table Appropriate primary key for artwork identified	1
	Text field for *Art_Title*	1
	Foreign key – primary key from *Artist* table listed	1
	Sales table Correct and consistently presented field names	1
	Correct data types	1
	Appropriate field sizes (not defaults)	1
	Foreign key – primary key from Customer table listed	1
	Foreign key – primary key from Artwork table listed	1
	At least 1 appropriate input mask in any table	1
	Relationships 1-to-many relationship between *Customer_ID* fields in *Customer* and *Sales* tables	1
	1-to-many relationship between *Art_ID* fields in *Artwork* and *Sales* tables	1
	1-to-many relationship between *Artist_ID* fields in *Artist* and *Artwork* tables	1
	Available marks	**20**

Task	Answer	Marks
	See Task 2 below for examples of graphics.	
2	All traces of the green background removed	1
	The image is straightened	1
	The image is in Portrait orientation	1
	The panel is transparent	1
	All of the frame is intact	1
	Available marks	**5**

Task	Answer	Marks
	See Task 3 below for examples of graphics.	
3	Only the correct area is affected	1
	An area of 'New Sky' image is applied	1
	The pool, the mountain, the door and the arch are intact	1
	The palm is still shown	1
	The palm tree trunk is intact	1
	The palm tree fronds are intact	1
	The palm tree interstices are filled with the "New Sky" image	1
	The door screen is reasonably intact	1
	The door Interstices are filled with "New Sky" image	1
	The mountain is intact	1
	Available marks	**10**

Task	Answer	Marks
	See Task 4 below for examples of graphics.	
4	All parts of the door are removed	1
	The pool water areas are restored	1
	The pool reflections are intact	1
	The pool edge is continuous	1
	The pool edge tapers	1
	The chairback is intact	1
	The paving is restored	1
	The edge of the paving is clear/smooth	1
	The image is shown in the frame	1
	The image fits the frame precisely as shown	1
	Available marks	**10**

Task	Answer	Marks
	See Task 5 below for examples of graphics.	
5	The label has 2 × layers shaped as shown	1
	The size of the overlap of layers is correct	1
	The alignment of the layers is correct	1
	A gold fill is used	1
	A gradient fill is used	1
	A light-dark-light multi gradient fill is used	1
	The gradient fill matches the proportions as shown	1
	2 × screws are shown with a 3d effect	1
	A gold gradient fill used	1
	The layers of the screw head are aligned as shown	1
	The screw heads are positioned as shown	1
	The text on the label is correct	1
	The font used matches that shown with a clear 3d effect	1
	The label is fitted to the frame	1
	The alignment of the label is correct	1
	Available marks	**15**

Task	Answer	Marks
	See Task 6 below for examples of graphics.	
6	The PFrame image is used – in Landscape orientation	1
	The canvas size is set to 500px × 400px	1
	There is a blue – pink transition shown	1
	The fades and transition are smooth	1
	The transition takes 7 seconds	1
	The title rises smoothly	1
	The title flips on a horizontal axis	1
	The title takes 3 secs to reach the correct position	1
	The artist name – Ewan Ali – rises from the bottom of the frame	1
	The artist's name flips on a horizontal axis	1
	The artist's name takes 2 secs to reach the correct position	1
	The gallery name rises	1
	The gallery name takes 2 secs to reach the correct position	1
	All fonts are consistent, serif and calligraphic	1
	All text is black	1
	All motions of the text are smooth and straight	1
	Available marks	**16**

Task	Answer	Marks
	See Task 7 below for examples of graphics.	
7	The Olives image used for new background	1
	The image takes 3 secs to fill the frame	1
	The image is masked to the frame	1
	The motion of the image is smooth	1
	The Headland image used for new background	1
	The image takes 3 secs to fill the frame	1
	The image is masked to the frame	1
	The motion of the image is smooth	1
	The Bay image is used for a new background	1
	The image takes 3 secs to fill the frame	1
	The image is masked to the frame	1
	The motion of the image is smooth	1
	All 3 images, masks and motions are correct	1
	The animation stops on the last frame	1
	Available marks	**14**

Task 1

DATA DICTIONARY

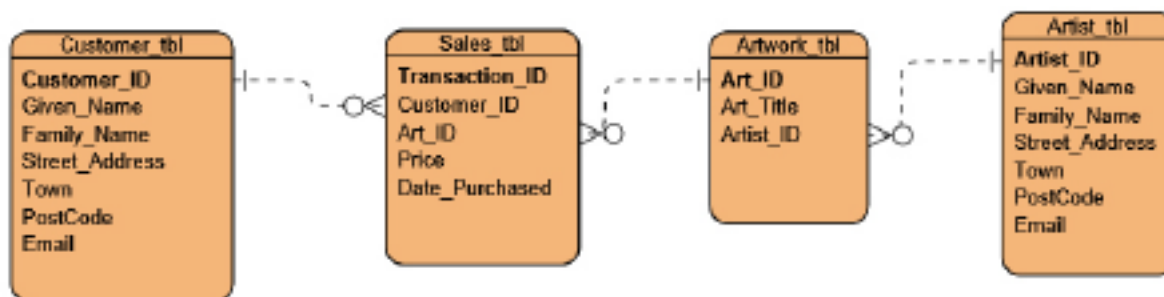| Customer_tbl					
Field Name	Data Type	Data Format	Field Size	Description	Example
Customer_ID	Text	Primary Key	3	Unique	C01
Given_Name	Text	>L<?????????????	25	Forename of customer	Elizabeth
Family_Name	Text	>L<?????????????	25	Surname of customer	Able
Street_ Address	Text		35	1st address line	69 Scotsburn Road
Town	Text	>L??????????????	25	Town	TAL-Y-BONT
PostCode	Text	>LLCCaaaa	9	Postcode of address	L3J 4ST
Email	Text		50	Email address of customer	lizzieable@ spambob.com

Artist_tbl					
Field Name	Data Type	Data Format	Field Size	Description	Example
Artist_ID	Text	Primary Key	3	Unique	A01
Given_Name	Text	>L<?????????????	25	Forename of artist	Spencer
Family_Name	Text	>L<?????????????	25	Surname of artist	Andrews
Street_ Address	Text		35	1st address line	10 Traill Street
Town	Text	>L?????????????	25	Town	ROTHERBY
PostCode	Text	>LLCCaaaa	9	Postcode of address	LE14 3UG
Email	Text		50	Email address of artist	spencerandrews@ mailinator.com

Artwork_tbl					
Field Name	Data Type	Data Format	Field Size	Description	Example
Art_ID	Integer	Primary Key	3	Unique	001
Art_Title	Text	>L<????????????? ????????	50	Name of artwork	March Hare
Artist_ID	Integer	Foreign Key	3	Link Artist_tbl	001

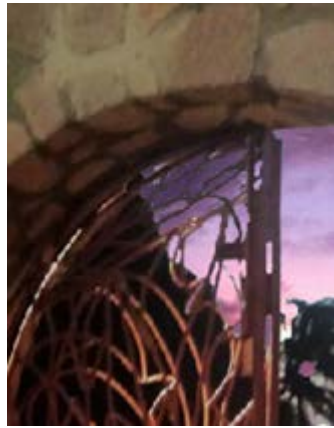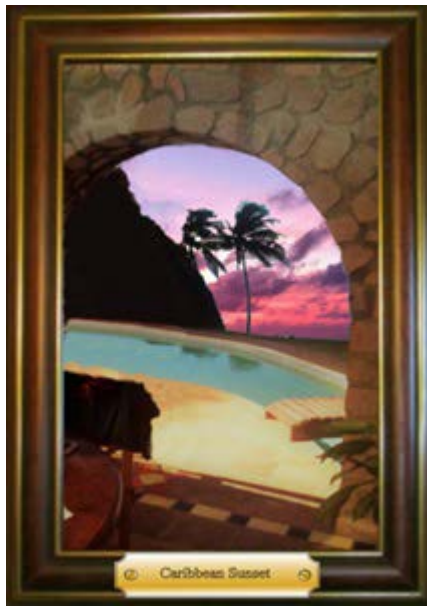| Sales_tbl					
Field Name	Data Type	Data Format	Field Size	Description	Example
Transaction_ ID	Text	Primary Key	5	Unique	T0001
Customer_ID	Integer	Foreign Key	3	Link	001
Art_ID	Integer	Foreign Key	3	Link Artist_tbl	001
Price	Currency	2 dp	15	Price artwork sold for	€140.00
Date_ Purchased	Date	dd/mm/yyyy	10	Date artwork purchased	19/11/2016

ERD

Task 2

Task 3

Task 4

Task 5

Task 6

Task 7