INFORMATION TECHNOLOGY **9626/04**

Paper 4 Advanced Practical **October/November 2017**
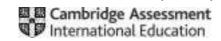
MARK SCHEME

Maximum Mark: 110

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.

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This document consists of **8** printed pages.

		Mark
Task 1 Logo	The first ellipse is correctly angled	**1**
	The second ellipse is combined with the first ellipse and angled correctly	**1**
	The rectangle is correctly placed and angled	**1**
	The two ellipses and the rectangle are filled black with a single outline	**1**
	The small white circular hole is correctly placed	**1**
	Three straight white evenly spaced strings are shown	**1**
	There is a red outline around the whole logo	**1**
	The text 'Rock ICT' is shown in a white sans serif font	**1**
	The text is correctly curved and placed	**1**
	The logo has the correct proportions	**1**
	The logo size is 200 px by 200 px	**1**
	The logo is saved as a .PNG file	**1**
		12

		Mark
Task 2(a) Animation	The frame/stage size is set to 512 by 288 pixels	1
	The background is black and remains blank for **2** seconds	1
	The text 'Rock' appears at bottom left corner	1
	The text 'ICT' appears at top right corner	1
	All the text is white and 24 point	1
	Both 'Rock' and 'ICT' move to centre and align correctly	1
	The animation of the text is smooth and takes **3** seconds	1
	The letter 'R' (only) in the text 'Rock' turns red for **2** seconds	1
	The text 'Rock ICT' then fades out in **5** seconds	1
	The fade out of the text animation is smooth	1
	All the timings for the 'Rock ICT' text animation are correct	1
	The text 'The Best' fades in and out in **5** seconds	1
	The text 'The Best' is red	1
	The fade in and fade out of the text 'The Best' is smooth	1
	The guitar logo then appears small at centre of screen	1
	The logo grows larger to fill the centre of the screen in **3** seconds	1
	The growth of the logo animation is smooth	1
	The whole animation is **20** seconds in length	1
	The animation is set to loop	1
	The animation is exported in suitable format for the web	1
		20

		Mark
Task 2(b)		1
	A statement of 'Frames per second' is shown	1
	An explanation of term FPS is provided	1
	A description of the effects of increasing and decreasing the FPS is provided	1
		4

			Mark
Task 3(a) Spreadsheet	**Layout**	The text labels are shown exactly as specified in the question paper	1
		The text in cells A1, A3, A6 is wrapped	1
		The cells in rows 2, 5, 8, 11, 13 and 14 are blank (empty)	1
		All text is aligned as shown in the question paper and all currency is in euros (€)	1
	Initialisation	Cell B1 is set to 50 (attendees)	1
		Cell B12 is set to €250 (Security)	1
	Calculated results	4 speakers = €150	1
		Coloured lighting = €235 *The marks are awarded for calculated results only*	1
		Plastic seating = €50	1
		Total Cost = €685	1
	Validation	A test for entries <1 is successful	1
		A test for entries >100 is successful	1
	Drop down lists	A drop down list is created for Speakers with the correct 2 options only	1
		A drop down list created for Lighting with the correct 2 options only	1
		A drop down list created for Seating with the correct 2 options only	1
	Test for <50 attendees	4 speakers = €150 6 speakers = €225	1
		Lighting: White = €175 Coloured = €235	1
		Seating: Plastic = €35 Cushioned = €55	1
	Test for 50 attendees	4 speakers = €150 6 speakers = €225 *Marks are awarded for calculated results only*	1
		Lighting: White = €175 Coloured = €235	1
		Seating: Plastic = €50 Cushioned = €85	1
	Test for >75 attendees	4 speakers = €175 6 speakers = €250	1
		Lighting: White = €225 Coloured = €265	1
		Seating: Plastic = €75 Cushioned = €105	1
			24

			Mark
Task 3(b)	**Advantages**	*Answers such as:* Models are easy to use Formula can be used to automate the calculations Changes to values to test different scenarios Data can be presented in many different ways Can be used to test hypothesis Will provide consistent results of data	**6 from**
	Disadvantages	*Answers such as:* Cannot account for every possibility May restrict entries or investigations Cannot account for external/unforeseen possibilities They can be very time consuming to produce If the model contains errors it will produce incorrect results	
			6

			Mark
Task 4 Mailmerge	**Ticket number**	LEFT(), RIGHT() or MID() functions are used	1
		The correct Forename characters are chosen	1
		The correct Surname characters are chosen	1
		The correct Concatenation includes the Cost and no spaces	1
	Ticket	The labels are set at 7 cm by 8.5 cm	1
	Merge	The layout is set as 8 per page with evidence of *propogation*	1
	Document	The Forename mergefield is inserted	1
		The Surname mergefield is inserted with space or on a new line	1
		The Cost mergefield is inserted	1
		A conditional mergefield is used for ticket type *IF {Ticket_cost} = 55 "...*	1
		The correct TRUE conditional text is shown *'VIP Ticket'*	1
		The correct ELSE conditional text is shown *'Standard Ticket'*	1
		The Ticket number (only) is shown in italics	1
		The Name is in a serif font and is larger than the ticket number	1
		The logo is inserted and set to a suitable size	1
	Merged	All Tickets are merged and formatted correctly and 1 ticket per customer only	1
	Tickets	The correct 5 VIP tickets are shown	1
			17

			Mark
Task 4(b)	**Advantages**	*Answers such as:* Only one template needs to be created The same template can be used repeatedly Easier to proof read one letter Change in mergedoc merge will be updated Can display different text for different criteria	**6 from**
	Disadvantages	*Answers such as:* The data source needs to be kept up to date Letter can feel very generic Editing a field causes an error in the mergedoc Errors may not be identified until merge	
			6

			Mark
Task 5 Database	**Set-up**	All three correct files have been successfully imported	**1**
		The Booking_ID field is set as the primary key in the Bookings table	**1**
		The Venue_ ID field is set as the primary key in Venues table	**1**
		The Company_ID field is set as the primary key in Company_details table	**1**
		A 1 to Many relationship is set between Company_details!Company_ID and Bookings!Company_ID fields	**1**
		A 1 to Many relationship is set between Venues!Venue_ID and Bookings!Venue_ID fields	**1**
	Form	The Bookings form is created with a suitable title	**1**
		The header area is white	**1**
		The form title is in a red sans serif font	**1**
		The logo is present at the top of the form	**1**
		The main area is pale blue	**1**
		The Company_name is the only field shown outside the subform	**1**
		Suitable navigation buttons are present on the form	**1**
		A subform is created and linked for the booking details	**1**
		The Booking_ID field is shown in the subform	**1**
		The Booking_date field is shown in the subform	**1**
		The Venue_name field is shown in the subform	**1**
		Only these fields are shown in the subform	**1**
		No record selectors/navigation buttons/scroll bars are shown in the subform	**1**
		The 'Brilliant Bands' record shows 8 bookings in the subform	**1**
		All data entry is blocked	**1**
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		Total Paper	**110**