

Cambridge Assessment International Education

Cambridge International Advanced Subsidiary and Advanced Level

INFORMATION TECHNOLOGY

9626/02

Paper 2 Practical

October/November 2017

MARK SCHEME
Maximum Mark: 110

Published

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This document consists of 7 printed pages.

[Turn over

Step 1: Data Dictionary

Employees/Personnel table

Field	Data type	Field size	Other metadata – input mask, validation, default value etc.			
Payroll_Number	Text/Alphanumeric	7 chrs	Primary			
			Key			
Given_Name	Text/Alphanumeric					
Family_Name	Text/Alphanumeric			·		
Street_Address	Text/Alphanumeric					
City/Town	Text/Alphanumeric					
Post_Code	Text/Alphanumeric					
Date_of_Birth	Date/Time		dd/mm/yyyy			
Site	Text/Alphanumeric			·		
Job_Code	Text/Alphanumeric			·		
Contract_Hours	Number		Integer?			
Date_Employed	Date/Time					

	Data dictionary	with 3 tables	1 mark
	Employees table	Table name – appropriate e.g. Employees/Personnel	1 mark
		Payroll number as primary key	1 mark
١		Personal information fields	1 mark
,		Personal information data types	1 mark
		Job information fields	1 mark
		Job information data types	1 mark
		DOB once only	1 mark
		Employment date once only	1 mark
		Any extra metadata	1 mark

Sites table

Field	Data type	Field	Other me	Other metadata – input ma				
i ieiu	Data type	size	validation, default value etc.					
Site	Text/Alphanumeric	7 chrs	Primary					
			Key					
Address_1	Text/Alphanumeric	2 chrs						
Address_2	Text/Alphanumeric							
Town/City	Text/Alphanumeric							
Post_Code	Text/Alphanumeric							
Office_Tel_Number	Text/Alphanumeric							
Office_Fax_Number	Text/Alphanumeric							

Sites table Table name – appropriate e.g. Sites 1 mark
Correct fields 1 mark
Primary key 1 mark

Job_Codes/Job description table

Field	Data type	Field	Other m	k,						
i ieiu	Data type	size	validation, default value etc.							
Job_Code	Text/Alphanumeric	2	Primary							
	-	chrs	key							
Job_Description	Text/Alphanumeric									

	Job_codes / job description table	
	Table name – appropriate e.g. Job codes	1 mark
	Job code = Primary Key	1 mark
	Correct fields	1 mark
	Correct data types	1 mark
	Some field sizes set	1 mark
© UCLES 2017	Any extra metadata	1 mark

Step 2: Prepare data

	Payroll_Number	Site	Job_Code	Contract_Hours	Date_of_Employment	Given_Name	Family_Name	Date_of_Birth
	AS3722C	Ashford	TO	16	08/08/2001	Caitlin	Anderson	03/08/1999
	AS3187B	Ashford	SA	16	08/05/2007	Benjamin	Archer	27/02/1984
	AS5495J	Ashford	SM	40	19/10/2004	Hannah	Atkins	27/06/1978
	AS5676E	Ashford	WO	8	24/04/2014	Rosie	Baker	20/12/1983
	AS5394C	Ashford	SA	8	07/11/2009	Abbie	Baldwin	10/02/1982
	AS2940C	Ashford	TO	40	26/04/2016	Sean	Bolton	25/06/1970
	AS5010D	Ashford	TO	16	28/06/2003	Holly	Burton	24/07/2000
	BO5150F	Bolton	WO	24	28/02/2001	Isaac	Butler	16/04/1993
	BO6598M	Bolton	LE	32	02/03/2007	Isabella	Campbell	14/12/1977
	BO5288M	Bolton	AA	32	07/05/2010	Bradley	Cooper	12/10/1973
	BO4488F	Bolton	WO	8	24/06/2002	Madeleine	Davey	21/06/1970
	BO3722G	Bolton	TO	8	22/07/2007	Lauren	George	20/05/1985
	BO3627H	Bolton	LO	24	08/11/2015	Jake	Hammond	11/08/1977
	CA4845C	Cardiff	LE	8	05/02/2000	Maya	Alexander	09/07/1982
	CA5494K	Cardiff	AA	32	10/06/2008	Alisha	Andrews	14/12/1983
	CA6175A	Cardiff	LO	40	23/08/2016	Jasmine	Atkinson	03/11/1987
	CA6382L	Cardiff	LO	24	05/10/2008	Naomi	Burrows	22/06/1984
	CA6749A	Cardiff	WO	16	14/09/2007	Callum	Chan	12/10/1997
	CA3423K	Cardiff	WM	40	27/06/1999	Taylor	Clark	11/04/1970
	CA6689K	Cardiff	LO	8	25/12/2013	Amy	Collier	22/11/1988
	DU3666M	Dundee	TM	40	16/04/2015	Jonathan	Allen	02/01/1997
	DU4446F	Dundee	LO	16	01/11/2000	Luca	Atkinson	13/09/1974
	DU6576J	Dundee	SA	40	15/08/1999	Alfie	Barker	27/01/1976
	DU3843G	Dundee	LO	24	17/10/1998	Rosie	Bartlett	02/11/1982
	DU2634E	Dundee	AM	40	15/01/2007	Lewis	Bevan	16/04/1969
	DU3541C	Dundee	WO	24	16/12/2003	Charlotte	Buckley	05/06/1978
	DU5240K	Dundee	AA	32	19/09/2015	Alicia	Chadwick	09/03/1989
Prepare data Ashford, Bolton, Cardiff data in one table Dundee data added No repeated headings No duplicated fields							table	1 mark 1 mark 1 mark 1 mark

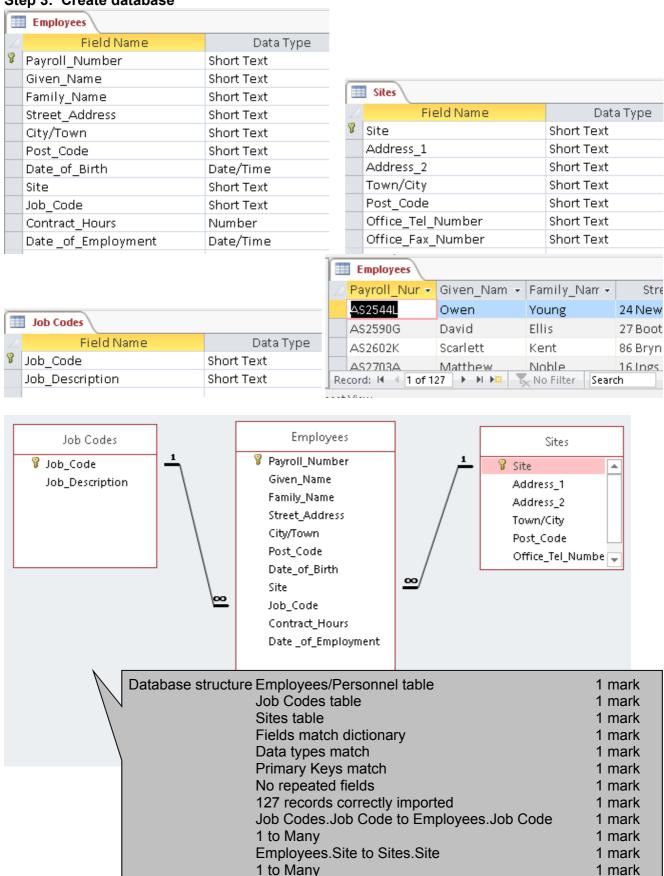
Site	Job_Code	Contract_Hours
=VLDOKUP(\$A2,AII_sites_info!\$A\$2:\$H\$128,2,0)	=VLOOKUP(\$A2,AII_sites_info!\$A\$2:\$H\$128,3,0)	=VLDOKUP(\$A2,AII_sites_info!\$A\$2:\$H\$128,4,0)
=VLOOKUP(\$A3,AII_sites_infol\$A\$2:\$H\$128,2,0)	=VLOOKUP(\$A3,AII_sites_info!\$A\$2:\$H\$128,3,0)	=VLOOKUP(\$A3,AII_sites_info!\$A\$2:\$H\$128,4,0)
=VLOOKUP(\$A4,AII_sites_infol\$A\$2:\$H\$128,2,0)	=VLOOKUP(\$A4,AII_sites_infol\$A\$2:\$H\$128,3,0)	=VLOOKUP(\$A4,AII_sites_infol\$A\$2:\$H\$128,4,0)
=VLOOKUP(\$A5_AII_sites_info!\$A\$2:\$H\$128,2,0)	=VLOOKUP(\$A5,AII_sites_info!\$A\$2:\$H\$128,3,0)	=VLOOKUP(\$A5,AII_sites_info!\$A\$2:\$H\$128,4,0)
=VLOOKUP(\$A6,AII_sites_info!\$A\$2:\$H\$128,2,0)	=VLOOKUP(\$A6,AII_sites_info!\$A\$2:\$H\$128,3,0)	=VLOOKUP(\$A6,AII_sites_info!\$A\$2:\$H\$128,4,0)

All_Employee_Data.xlsx

Sites s/s	Lookup to factory data	1 mark
1 01100 0/0	Absolute column reference	1 mark
	Site lookups from column 2	1 mark
	Job_Code lookups from column 3	1 mark
	Contract_Hours lookups from column 4	1 mark
	,FALSE or ,0	1 mark
	Replication	1 mark
	Job_Codes prepared as All_Employee_Data	1 mark

© UCLES 2017 Page 3 of 7





Step 4: Create and export report

Step 4.	Jieale a	IIIU EX	portre	port									
Staff n	umber	s at e	each f	actor	/						Total compa	any staff	127
Site	Admin Assistant	Admin Manager	Line Engineer	Line operative	Line Supervisor	Site Assistant	Site Manager				Warehouse Operative		
Ashford	7	1	2	5	2	4	1	2	4	1	6		
Balton	4	1	2	5	2	1	1	1	7	1	5		
Cardiff	3	1	2	0	2	1	1	1	1	1	3		
Dundee	5	1	2	10	2	1	1	1	4	1	В		
Name, Centre number, candidate number													
Staff R	eport.pdf				09/03/2	016 22:3	6	Adobe A	crobat D.		117 KB		
Report 1 Header set to 2cm Footer set to 2cm Both black All text white Sans serif font 24pt and 16pt text Correct title text Correct totals text No bounding boxes, gridlines or other shading Total shown in header Correct Total (127) shown Correct totals for Jobs Layout - Site aligned with numbers Layout - Labels fully visible Layout - Labels aligned with information Correct 4 sites shown Correct 11 roles shown Description not codes used No Warehouse Assistants column Exported as pdf one page									1 mark				

© UCLES 2017 Page 5 of 7

Step 5: Edit video

Step 3. Luit video		
Video clip	All text in a Serif font	1 mark
	All text in 48pt	1 mark
	Clips in correct order	1 mark
	No transition at start	1 mark
	Glacier.png used for title frames	1 mark
	Voice over 1 at start of video	1 mark
	Fly to the ICE caption shown	1 mark
	Caption starts after 1 second	1 mark
	Caption seen for 2 seconds	1 mark
	Caption Scrolls up	1 mark
	Froztbite Tours caption shown	1 mark
	Caption shown just after 1st	1 mark
	Caption does not scroll	1 mark
	Caption seen for 4 seconds	1 mark
	Caption lasts 2 seconds into Take_Off clip	1 mark
	Blank frames deleted from Take_Off clip	1 mark
	Helicopter sound reduced/low both clips	1 mark
	Voice over 2 during Take_Off clip	1 mark
	Transition between Take_Off and Landing	1 mark
	Landing clip speed doubled (9 seconds)	1 mark
	Voice over 3 added	1 mark
	Helicopter.png used for caption frames	1 mark
	Helicopter frames show for 4 seconds	1 mark
	See the powercaption shown	1 mark
	Caption shown for 2 seconds	1 mark
	See Froztbite caption shown	1 mark
	Caption shown for remainder of clip	1 mark
	Transitions between Landing clip and caption	1 mark
	Voice over 4 added	1 mark
	Voice over 4 (during display of website)	1 mark
	Voice over 4 completes before end of clip	1 mark
	Widescreen format set (16:9)	1 mark
	Video format saved at 854 x 480	1 mark
	Video about 21 +? seconds long	1 mark
	Saved as FroztbiteVideo	1 mark
	In mp4 format	1 mark

Step 6: Edit audio and add as soundtrack to video

otop of East additional and add at constitution to video								
All beeps removed	1 mark							
All clips trimmed	1 mark							
Audio clips < 4 seconds each	1 mark							
Clips re-saved as VoiceOverN	1 mark							

© UCLES 2017 Page 6 of 7

Step 7: Audio theory questions The AIFF Audio files were converted to MP3 files.

Give 2 reasons for this conversion

1	Reduced file size – download times – email attachment limits – any valid
2	Compatible with more applications

Conversion to .mp3 2 from:

Reduced file size

Reduce download times Email attachment limits

Compatible with more applications

2 marks

You have been asked to resave the audio files in WAV format.

Give 2 reasons for advising against this

erro = reasons for davising against time.			
1	Increased file size etc.		
2	Data lost in compression cannot be replaced.		

Advise against .wav Increased file size etc. 1 mark
Data lost in compression cannot be replaced 1 mark

List the following:

Audio file	File size	Bit rate
Soundclip1.mp3	169 KB	256 kbps

File size 169 kb 1 mark
Bit rate 256 kbps 1 mark

Explain why some people would say the bit rate used is unnecessarily high.

Average human cannot discern any increase in quality above 128kbps

Average human cannot discern any increase in quality above 128kbps 1 mark

© UCLES 2017 Page 7 of 7