INFORMATION TECHNOLOGY **9626/02**

Paper 2 Practical **March 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.

Cambridge will not enter into discussions about these mark schemes.

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This document consists of **17** printed pages.

Question	Answer		Marks
1	Image ratio of software set to 16:9	1 mark	**3**
	End of video cut	1 mark	
	Only 8–9 seconds of video remain (diver does not appear)	1 mark	
2	Title background set to 173turtle1.png	1 mark	**4**
	Title 5 seconds duration	1 mark	
	Logo placed with transparency	1 mark	
	Top right of background image and clearly visible	1 mark	
3	Title background full screen with no adjustment/movement	1 mark	**7**
	Additional 6 seconds duration	1 mark	
	Title text Help us preserve the wonders of the oceans	1 mark	
	Bottom left of image and clearly visible	1 mark	
	Large easily read font with good contrast	1 mark	
	Effect added for title animation	1 mark	
	Effect added to give sufficient time to read text within the 6 seconds	1 mark	
4	Caption background set to 173turtle2.jpg	1 mark	**10**
	Appropriate image editing to amend aspect ratio	1 mark	
	The image fills the full screen.	1 mark	
	Placed after video	1 mark	
	Caption frames 7 seconds duration	1 mark	
	Caption placed to right of turtle in a clearly visible font with good contrast	1 mark	
	Caption text includes Tawara Wildlife Trust	1 mark	
	2nd block includes Gala Dinner	1 mark	
	3rd block includes 18th December 2017	1 mark	
	Different effect added for caption animation	1 mark	
5	Clip placed as specified	1 mark	**3**
	Consistent animation used for all elements	1 mark	
	Soundtracks removed from both clips	1 mark	
6	Snapshot of final frame extracted in appropriate format	1 mark	**8**
	…and set as background for credits	1 mark	
	Credits 7 seconds duration	1 mark	
	Credits include:		
	Filmed by	1 mark	
	Location	1 mark	
	Country	1 mark	
	Appropriate blank line/s as spacing between credits	1 mark	
	Candidate name and numbers in credits in appropriate format	1 mark	
7	Movie exported / saved	1 mark	**2**
	In wmv format	1 mark	
8	End of clip removed	1 mark	**2**
	…cut to 51 seconds	1 mark	
9	Fade in present	1 mark	**4**
	…with appropriate duration for length of sound clip	1 mark	
	Fade out present	1 mark	
	…with appropriate duration for length of sound clip	1 mark	

Question	Answer		Marks
10	Audio clip saved as 173sound2.mp3	1 mark	**1**
11	Soundtrack added as specified	1 mark	**1**
12	Movie saved in wmv format	1 mark	**1**
13	Export or conversion of file type In mp4 format	1 mark 1 mark	**2**
14	Select 173auction.csv Correct text placed in footer in appropriate format	1 mark 1 mark	**2**

15	Column inserted in correct place
	…with appropriate label in cell C2
	Lookup function used
	    Cell ref column B
	    Relative reference (not range)
	    Range – external file link to 173charity.csv or copied cell range
	    Absolute reference
	    Correct return column 2 with FALSE parameter / sorted data set
		1 mark
		1 mark
		1 mark
		1 mark
		1 mark
		1 mark
		1 mark
		1 mark
			8

16	Lookup function used with relative reference to single cell in column E Range – external file link to 173bidder.csv Correct range A2:C41 with absolute reference Correct return column 3 with FALSE parameter / sorted data set Concatenate used or & Text ": " Second ampersand or correct syntax for concatenate function Second correct Lookup function with reference to column 2	1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark	**8**
17	Replication (to row 122)	1 mark	**1**
18	Text wrapped so single page wide Appropriate title formatting Appropriate numeric formatting Page layout set to A4 and portrait and display as 12pt	1 mark 1 mark 1 mark 1 mark	**4**
19	Charities (names or codes) as column labels …with full charity names displayed Bidder details (number or name) as row headings …with full names displayed Cost of winning bid as values …using Sum as mathematical operation …all correct values displayed Correct total for each person shown Correct total for each charity shown Text wrapped so single page wide Appropriate numeric formatting (values in dollars with 2dp)	1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark 1 mark	**11**

Question	Answer		Marks
20	Appropriate counting method	1 mark	**6**
	…which counts only the three charity columns	1 mark	
	1st filter on counted cells	1 mark	
	2nd filter on >$20000	1 mark	
	Column headings retained	1 mark	
	Correct 4 records selected	1 mark	
21	6 from:		**6**
	Solution uses multiple spreadsheets to remove duplicate data …	1 mark	
	…which is more efficient than a single sheet	1 mark	
	To extend the spreadsheet formulae would need to be replicated …	1 mark	
	…this would need to be done manually/macro	1 mark	
	Named ranges would offer a more efficient solution than absolute ref	1 mark	
	Staff are likely to be more familiar with spreadsheet software	1 mark	
	Only 1 person can add data at a time	1 mark	
22	<u>Relational</u> database	1 mark	**5**
	4 from:		
	Multiple users can simultaneously edit data		
	Referential integrity can be set but would make little difference to efficiency		
	…as data is unlikely to require editing/much editing		
	More staff expertise required to use a database than a spreadsheet		
	Normalisation of data can be better applied to database solution		
	Database uses crosstab query rather than pivot table in spreadsheet		
	…although functionality of both is similar, crosstab is more flexible		
23	Pie chart	1 mark	**5**
	Appropriate title	1 mark	
	Correct percentages shown	1 mark	
	Segments distinctive in black and white	1 mark	
	Appropriate labels and/or legend with charity name in full	1 mark	
24	With correct two segments (1 and 2 grouped together)	2 marks	**6**
	Award 1 mark if correct three segments present		
	Appropriate title	1 mark	
	Correct percentages shown	1 mark	
	Correct values shown	1 mark	
	Appropriate labels and/or legend	1 mark	

Evidence 1

TWT_1_	Image ratio of software set to 16:9	1 mark
	End of video cut	1 mark
	Only 8–9 seconds of video remain (diver does not appear)	1 mark
	Title background set to 173turtle1.png	1 mark
	Title 5 seconds duration	1 mark
	Logo placed with transparency	1 mark
	Top right of background image and clearly visible	1 mark
	Title background full screen with no adjustment/movement	1 mark
	Additional 6 seconds duration	1 mark
	Title text Help us preserve the wonders of the oceans	1 mark
	Bottom left of image and clearly visible	1 mark
	Large easily read font with good contrast	1 mark
	Effect added for title animation	1 mark
	Effect added to give sufficient time to read text within the 6 seconds	1 mark
	Caption background set to 173turtle2.jpg	1 mark
	Appropriate image editing to amend aspect ratio	1 mark
	The image fills the full screen	1 mark
	Placed after video	1 mark
	Caption frames 7 seconds duration	1 mark
	Caption placed to right of turtle in a clearly visible font with good contrast	1 mark
	Caption text includes Tawara Wildlife Trust	1 mark
	2nd block includes Gala Dinner	1 mark
	3rd block includes 18th December 2017	1 mark
	Different effect added for caption animation	1 mark
	Clip placed as specified	1 mark
	Consistent animation used for all elements	1 mark
	Soundtracks removed from both clips	1 mark
	Snapshot of final frame extracted in appropriate format	1 mark
	…and set as background for credits	1 mark
	Credits 7 seconds duration	1 mark
Credits incl:	Filmed by	1 mark
	Location	1 mark
	Country	1 mark
	Appropriate blank line/s as spacing between credits	1 mark
	Candidate name and numbers in credits in appropriate format	1 mark
	Movie saved	1 mark
	In wmv format	1 mark

Video file TWT_1_

Audio file 173sound2.mp3

173sound2	End of clip removed	1 mark
	…cut to 51 seconds	1 mark
	Fade in present	1 mark
	…with appropriate duration for length of sound clip	1 mark
	Fade out present	1 mark
	…with appropriate duration for length of sound clip	1 mark
	Audio clip saved as 173sound2.mp3	1 mark

Video file TWT_2_

TWT_2_	Soundtrack added as specified	1 mark
	Movie saved in wmv format	1 mark

Video file TWT_3_

TWT_3_	Export or conversion of file type	1 mark
	In mp4 format	1 mark

Tasks 14–16

	A	B	C	D	E
1					
2	Lot number	Charity	Charity name	Cost of winning bid	Winn bidd num
3	1	AA	=VLOOKUP(B3,$H$3:$I$5,2,FALSE)	5950	35
4	2	THT	=VLOOKUP(B4,$H$3:$I$5,2,FALSE)	4490	10
5	3	THT	=VLOOKUP(B5,$H$3:$I$5,2,FALSE)	2190	1
6	4	TC	=VLOOKUP(B6,$H$3:$I$5,2,FALSE)	4290	28
7	5	THT	=VLOOKUP(B7,$H$3:$I$5,2,FALSE)		
8	6	AA	=VLOOKUP(B8,$H$3:$I$5,2,FALSE)	2460	
9	7	TC	=VLOOKUP(B9,$H$3:$I$5,2,FALSE)	5020	16
10	8	TC	=VLOOKUP(B10,$H$3:$I$5,2,FALSE)	5600	33
11	9	AA	=VLOOKUP(B11,$H$3:$I$5,2,FALSE)	1610	22
12	10	TC	=VLOOKUP(B12,$H$3:$I$5,2,FALSE)	700	10
13	11	TC	=VLOOKUP(B13,$H$3:$I$5,2,FALSE)	590	8
14	12	AA	=VLOOKUP(B14,$H$3:$I$5,2,FALSE)	2650	10
15	13	THT	=VLOOKUP(B15,$H$3:$I$5,2,FALSE)	2150	25
16	14	THT	=VLOOKUP(B16,$H$3:$I$5,2,FALSE)	6130	24
17	15	TC	=VLOOKUP(B17,$H$3:$I$5,2,FALSE)	1300	17
18	16	THT	=VLOOKUP(B18,$H$3:$I$5,2,FALSE)	4720	36
19	17	TC	=VLOOKUP(B19,$H$3:$I$5,2,FALSE)	2490	21
20	18	AA	=VLOOKUP(B20,$H$3:$I$5,2,FALSE)	6390	25
21	19	TC	=VLOOKUP(B21,$H$3:$I$5,2,FALSE)	6690	2
22	20	TC	=VLOOKUP(B22,$H$3:$I$5,2,FALSE)	1180	40
23	21	THT	=VLOOKUP(B23,$H$3:$I$5,2,FALSE)	4680	8
24	22	TC	=VLOOKUP(B24,$H$3:$I$5,2,FALSE)	3290	37
25	23	AA	=VLOOKUP(B25,$H$3:$I$5,2,FALSE)	6970	20
26	24	THT	=VLOOKUP(B26,$H$3:$I$5,2,FALSE)	3460	25
27	25	TC	=VLOOKUP(B27,$H$3:$I$5,2,FALSE)	5520	7

Charity name column

Column	Inserted in correct place	1 mark
Cell C2	Appropriate label	1 mark
Lookup	Function used	1 mark
Cell ref	Column B	1 mark
	Relative reference	1 mark
Correct range		
	173charity.csv	
	or copied cell range	1 mark
	Absolute reference	1 mark
Correct return col 2 with FALSE/sorted data		1 mark

Correct data file used		1 mark
Footer	Text 100% correct	1 mark

Auction item winners - last edited by: A Candidat

	F	
1	Auction data	
2	Winning bidder name	
3	=VLOOKUP(E3,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E3,'173bidder.csv'!$A$2:$C$4	
4	=VLOOKUP(E4,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E4,'173bidder.csv'!$A$2:$C$4	
5	=VLOOKUP(E5,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E5,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
6	=VLOOKUP(E6,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E6,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
7	=VLOOKUP(E7,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E7,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
8	=VLOOKUP(E8,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E8,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
9	=VLOOKUP(E9,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E9,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
10	=VLOOKUP(E10,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E10,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
11	=VLOOKUP(E11,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E11,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
12	=VLOOKUP(E12,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E12,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
13	=VLOOKUP(E13,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E13,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
14	=VLOOKUP(E14,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E14,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
15	=VLOOKUP(E15,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E15,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
16	=VLOOKUP(E16,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E16,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
17	=VLOOKUP(E17,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E17,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
18	=VLOOKUP(E18,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E18,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
19	=VLOOKUP(E19,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E19,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
20	=VLOOKUP(E20,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E20,'173bidder.csv'!$A$2:$C$4	
21	=VLOOKUP(E21,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E21,'173bidder.csv'!$A$2:$C$4	
22	=VLOOKUP(E22,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E22,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
23	=VLOOKUP(E23,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E23,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
24	=VLOOKUP(E24,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E24,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
25	=VLOOKUP(E25,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E25,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
26	=VLOOKUP(E26,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E26,'173bidder.csv'!$A$2:$C$41,2,FALSE)	
27	=VLOOKUP(E27,'173bidder.csv'!$A$2:$C$41,3,FALSE)&": "&VLOOKUP(E27,'173bidder.csv'!$A$2:$C$41,2,FALSE)	

Annotation (callout to rows 3–4):

Winning bidder name column	
Lookup with relative ref to E?	1 mark
Range – external file link to 173bidder.csv	1 mark
Correct range A2:C41 with absolute ref	1 mark
Return col 3 & FALSE / sorted data set	1 mark
Concatenate or &	1 mark
Text ": "	1 mark
Second & or correct syntax for concatenate	1 mark
Second lookup with reference to column 2	1 mark

Annotation (callout to rows 18–21):

Replication	
2 columns to row 122	1 mark

Auction item winners - last edited by: A Candidate, ZZ999, 9999

	H	I
1		
2		
3	TC	Turtleweek Conservation
4	THT	Tawara Hospital Trust
5	AA	Age Assistance
6		
7		
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24		
25		
26		
27		

Auction item winners - last edited by: A Candidate, ZZ999, 9999

	A	B	C	D	E	F
1			Auction data			
2	Lot number	Charity	Charity name	Cost of winning bid	Winning bidder number	Winning bidder name
3	1	AA	Age Assistance	$5,950.00	35	Wexler: Traugott
4	2	THT	Tawara Hospital Trust	$4,490.00	10	Pushing: Pat
5	3	THT	Tawara Hospital Trust	$2,190.00	1	Gupta: Kratika
6	4	TC	Turtleweek Conservation	$4,290.00	28	Schmitt: Gunther
7	5	THT	Tawara Hospital Trust	$970.00	5	Jacobs: Tomas
8	6	AA	Age Assistance	$2,460.00	24	Jenkinson: Holly
9	7	TC	Turtleweek Conservation	$5,020.00	16	Beyer: Friedhelm
10	8	TC	Turtleweek Conservation	$5,600.00	33	Royle: Michael
11	9	AA	Age Assistance	$1,610.00	22	Pinoir: Jeremy
12	10	TC	Turtleweek Conservation	$700.00	10	Pushing: Pat
13	11	TC	Turtleweek Conservation	$590.00	8	Chase: Holly
14	12	AA	Age Assistance	$2,650.00	10	Pushing: Pat
15	13	THT	Tawara Hospital Trust	$2,150.00	25	Lopez: Eugenio
16	14	THT	Tawara Hospital Trust	$6,130.00	24	Jenkinson: Holly
17	15	TC	Turtleweek Conservation	$1,300.00	17	Bayer: Evert
18	16	THT	Tawara Hospital Trust	$4,720.00	36	Lopez: Rafael
19	17	TC	Turtleweek Conservation	$2,490.00	21	Fernandez: Toni
20	18	AA	Age Assistance	$6,390.00	25	Lopez: Eugenio
21	19	TC	Turtleweek Conservation	$6,690.00	2	Watson: Didier
22	20	TC	Turtleweek Conservation	$1,180.00	40	Platt: Karthilene
23	21	THT	Tawara Hospital Trust	$4,680.00	8	Chase: Holly
24	22	TC	Turtleweek Conservation	$3,290.00	37	Suarez: Juan
25	23	AA	Age Assistance	$6,970.00	20	Miller: Suzanne
26	24	THT	Tawara Hospital Trust	$3,460.00	25	Lopez: Eugenio
27	25	TC	Turtleweek Conservation	$5,520.00	7	Gad: Siddharth
28	26	AA	Age Assistance	$1,420.00	6	Cotterill: Elliot
29	27	TC	Turtleweek Conservation	$4,640.00	20	Miller: Suzanne
30	28	TC	Turtleweek Conservation	$1,250.00	7	Gad: Siddharth

Spreadsheet formatting

Text wrapped so single page wide	1 mark
Appropriate title formatting	1 mark
Appropriate numeric formatting	1 mark
Page layout set to A4 and portrait and 12pt font	1 mark

Auction item winners - last edited by: A Candidate, ZZ999 , 9999

	A	B	C	D	E
1	**Sum of Cost of winning bid**	**Column Labels**			
2	**Row Labels**	**Age Assistance**	**Tawara Hospital Trust**	**Turtleweek Conservation**	**Grand Total**
3	Bayer: Evert			$8,200.00	$8,200.00
4	Beyer: Friedhelm			$5,020.00	$5,020.00
5	Blenkinsop: Lydia	$4,240.00	$450.00		$4,690.00
6	Castro: Victor	$10,490.00	$240.00	$560.00	$11,290.00
7	Chase: Holly	$13,670.00	$7,160.00	$6,600.00	$27,430.00
8	Claes: Louis			$4,080.00	$4,080.00
9	Cotterill: Elliot	$3,530.00		$760.00	$4,290.00
10	Dhiman: Kratika		$7,500.00	$11,320.00	$18,820.00
11	Fernandez: Toni	$2,160.00	$10,390.00	$2,490.00	$15,040.00
12	Gad: Siddharth	$1,920.00	$4,350.00	$6,770.00	$13,040.00
13	Garrido: Pablo	$3,530.00			$3,530.00
14	Gupta: Kratika		$2,190.00		$2,190.00
15	Hegde: Fatima	$5,880.00	$4,620.00	$1,370.00	$11,870.00
16	Jacobs: Tomas		$2,110.00		$2,110.00
17	Jenkinson: Holly	$2,460.00	$19,520.00		$21,980.00
18	Jolley: Sharon	$6,920.00			$6,920.00
19	Kelly: Peter	$6,690.00		$6,480.00	$13,170.00
20	Lopez: Eugenio	$12,510.00	$7,640.00	$2,480.00	$22,630.00
21	Lopez: Rafael		$12,770.00	$13,880.00	$26,650.00
22	Lopez: Teresa			$3,490.00	$3,490.00
23	Miller: Suzanne	$6,970.00		$4,640.00	$11,610.00
24	Nicolaides: Nikos	$5,170.00			$5,170.00
25	Pagan: Pilar	$1,500.00	$13,180.00	$4,130.00	$18,810.00
26	Perfection: Peter		$920.00		$920.00
27	Pinoir: Jeremy	$2,550.00	$9,940.00	$14,520.00	$27,010.00
28	Platt: Karthilene		$1,950.00	$1,180.00	$3,130.00
29	Pushing: Pat	$6,060.00	$4,490.00	$8,130.00	$18,680.00
30	Roberts: Jim			$5,840.00	$5,840.00
31	Roth: Karl	$4,200.00		$9,510.00	$13,710.00
32	Royle: Michael		$4,870.00	$5,600.00	$10,470.00

	A	B	C	D	E
33	Schiffer: Maria			$1,940.00	$1,940.00
34	Schmitt: Gunther	$4,410.00		$11,070.00	$15,480.00
35	Schneider: Olga		$2,650.00		$2,650.00
36	Strauss: Oral			$7,880.00	$7,880.00
37	Suarez: Juan	$5,470.00	$4,100.00	$3,290.00	$12,860.00
38	Trommler: Friederike		$8,320.00	$6,840.00	$15,160.00
39	Watson: Didier	$2,240.00		$13,310.00	$15,550.00
40	Weissmuller: Gerhardt	$300.00		$5,330.00	$5,630.00
41	Wexler: Traugott	$15,340.00	$4,520.00	$1,640.00	$21,500.00
42	**Grand Total**	**$128,210.00**	**$133,880.00**	**$178,350.00**	**$440,440.00**

Pivot table

Charities (names or codes) as column labels	1 mark
…with full charity names	1 mark
Bidder details as row headings	1 mark
…with full names displayed	1 mark
Cost of winning bid as values	1 mark
… using Sum as mathematical operation	1 mark
…all correct values displayed	1 mark
Correct total for each person shown	1 mark
Correct total for each charity shown	1 mark
Text wrapped so single page wide	1 mark
Appropriate numeric formatting	1 mark

Evidence 7

Pivot table extract

Appropriate counting method	1 mark
… which counts only the three charity columns	1 mark

	A	B	C	D	E	F
1	Sum of Cost of winning bid	Column Labels				
7	Chase: Holly	13670	7160	6600	27430	=COUNT(B7:D7)
20	Lopez: Eugenio	12510	7640	2480	22630	=COUNT(B20:D20)
27	Pinoir: Jeremy	2550	9940	14520	27010	=COUNT(B27:D27)
41	Wexler: Traugott	15340	4520	1640	21500	=COUNT(B41:D41)

PUBLISHED

Custom AutoFilter   ?   ✕

Show rows where:

| equals | | 3 | |

◉ And ○ Or

Use ? to represent any single character
Use * to represent any series of characters

OK   Cancel

Pivot table extract
1st filter on counted cells   1 mark
2nd filter on >$20000   1 mark

Custom AutoFilter   ?   ✕

Show rows where:

| is greater than | | 20000 | |

◉ And ○ Or

Use ? to represent any single character
Use * to represent any series of characters

OK   Cancel

Evidence 8

	A	B	C	D	E	F
1	Sum of Cost of winning bid	Column Labels				
2	Row Labels	Age Assistance	Tawara Hospital Trust	Turtleweek Conservation	Grand Total	.
7	Chase: Holly	$13,670.00	$7,160.00	$6,600.00	$27,430.00	3
20	Lopez: Eugenio	$12,510.00	$7,640.00	$2,480.00	$22,630.00	3
27	Pinoir: Jeremy	$2,550.00	$9,940.00	$14,520.00	$27,010.00	3
41	Wexler: Traugott	$15,340.00	$4,520.00	$1,640.00	$21,500.00	3

Pivot table extract
Column headings retained   1 mark
Correct 4 records selected   1 mark

Evidence 9
6 from:
Solution uses multiple spreadsheets to remove duplicate data …
…which is more efficient than a single sheet
To extend the spreadsheet formulae would need to be replicated …
…this would need to be done manually/macro
Named ranges would offer a more efficient solution than absolute ref
Staff are likely to be more familiar with spreadsheet software
Only 1 person can add data at a time
…although functionality of both is similar, crosstab is more flexible

1 mark each
Max 6

Evidence 10

Relational database   **1 mark**

4 from:

Multiple users can simultaneously edit data

Referential integrity can be set but would make little difference to efficiency

…as data is unlikely to require editing/much editing

More staff expertise required to use a database than a spreadsheet

Normalisation of data can be better applied to database solution

Database uses crosstab query rather than pivot table in spreadsheet

…although functionality of both is similar, crosstab is more flexible

1 mark each
Max 4

Evidence 11

PERCENTAGE DONATIONS TO EACH CHARITY

Age
Assistance
29%

Turtleweek
Conservation
41%

Tawara
Hospital
Trust
30%

Chart 1
Pie chart   1 mark
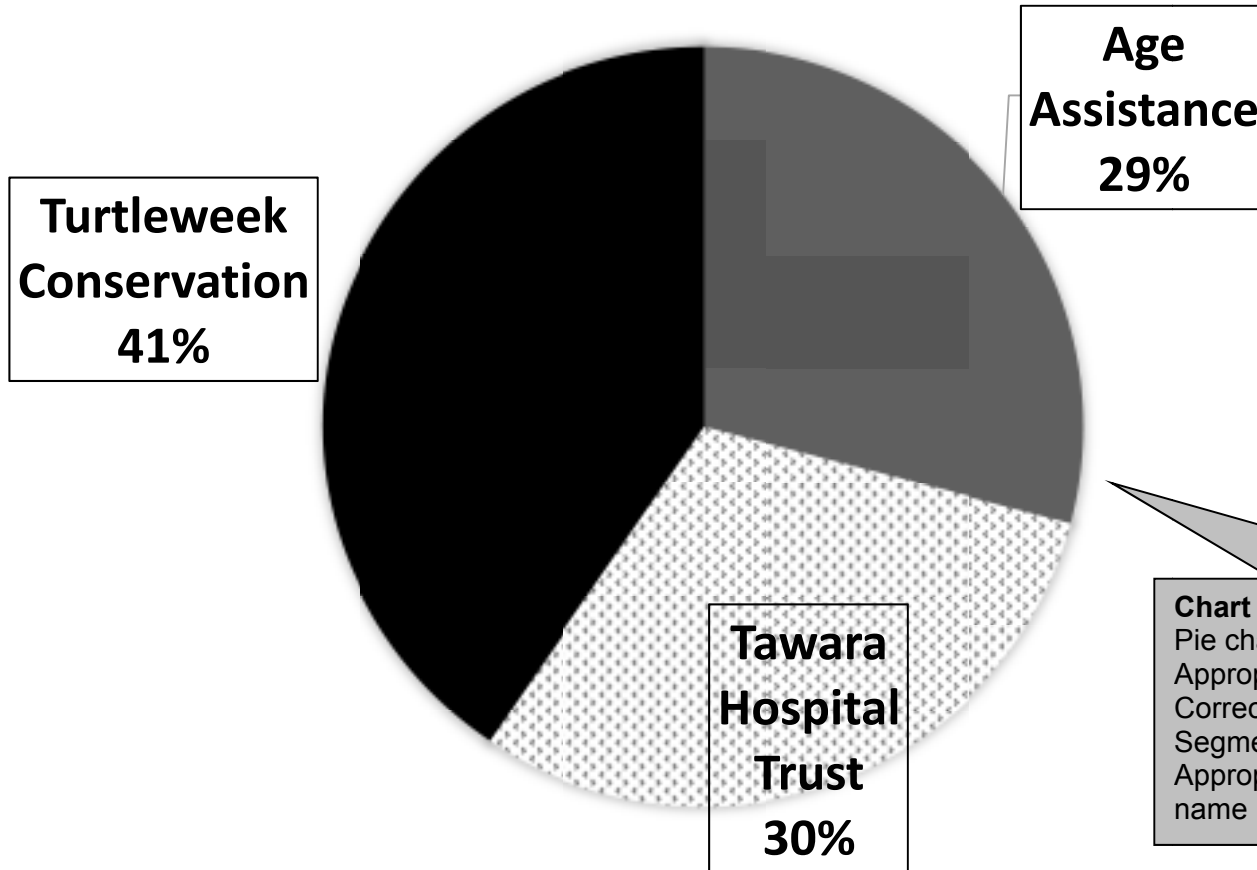Appropriate title   1 mark
Correct percentages shown   `1 mark
Segments distinctive in black and white   1 mark
Appropriate labels and/or legend with charity
name in full   1 mark

Evidence 12

NUMBER OF CHARITIES DONATED TO AT THE AUCTION
AND NUMBER OF PEOPLE MAKING THE DONATIONS

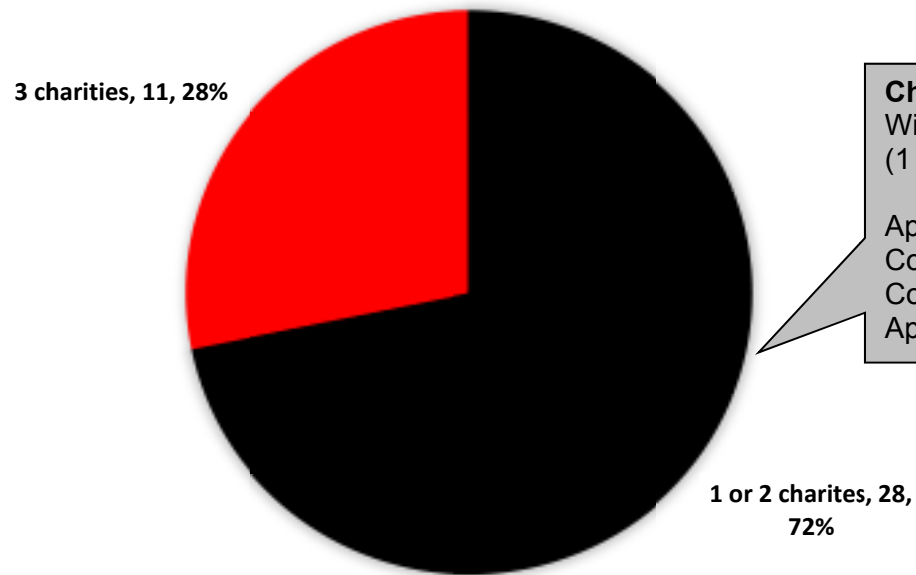3 charities, 11, 28%

1 or 2 charites, 28, 72%

Chart 2
With correct two segments
(1 and 2 grouped together)   2 marks
   Award 1 mark if correct three segments present
Appropriate title   1 mark
Correct percentages shown   1 mark
Correct percentage values shown   1 mark
Appropriate labels and/or legend   1 mark