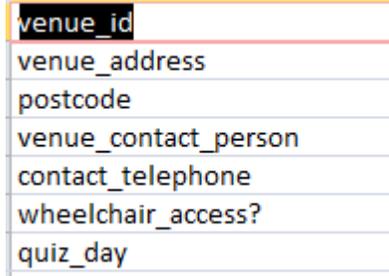# Mark Scheme (Results)

Summer 2021
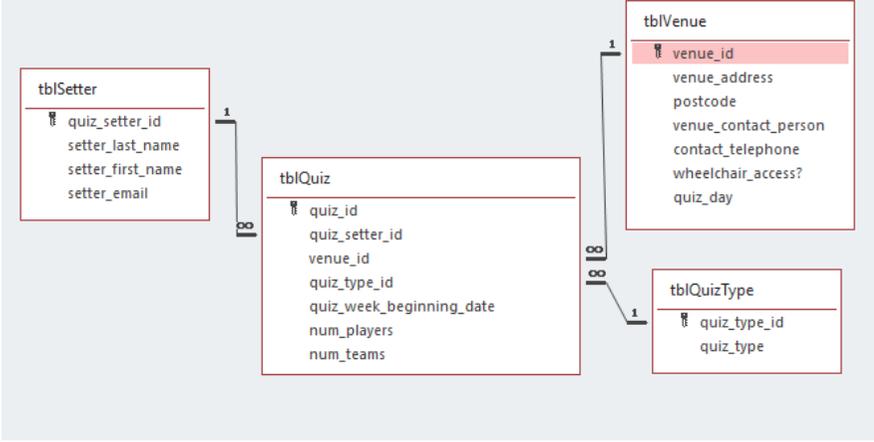
Pearson Edexcel International Advanced Subsidiary
In Information Technology (WIT14)
Unit 4

Question number	Answer		Additional Guidance	Mark
1(a)(i)	**Presence check and format check for contact_telephone**			
	A1	Presence check on contact_telephone field Required set to **yes** **OR v**alidation rule of 'Is Not Null'	Does not need validation text as no mark for given that	1
	A2	Input mask or suitable validation rule on contact_telephone field Input mask 00000000000 Input mask 00000000000;;_	Accept alternatives e.g. suitable validation rule Must be for the format of the telephone number given in the database	1
			Total	**2**
1(a)(ii)	**List check for quiz_day**			
	A3	List box or combo box added to quiz_day field	Must see field it is applied to. Should be design view but can accept datasheet view.	1
	A4	Correct values Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday	Accept datasheet view so long as can see all the values. Accept any order of days. Accept spelling errors	1
	A5	Limit to list set to Yes		1
			Total	**3**
1(a)(iii)	**Data type for wheelchair access**			
	A6	Yes/No		1
			Total	**1**

Question number		Answer	Additional Guidance	Mark
1(b)		**Edit venue form**		
	B1	Form includes all of the fields from the venue table venue_id venue_address postcode venue_contact_person contact_telephone wheelchair_access? quiz_day		1
	B2	venue_id is disabled		1
	B3	Combo/List box has been added to select a venue address	Do not need to see any values for the combo box	1
	B4	**One** from: • Form labels are appropriate (not database field names) • Form has meaningful title • Entry boxes on form are resized appropriately to reflect the data they will be used to enter • Instructions on how to use • Asterisk on any field except venue_id		1
	B5	Form would update to show the venue details for the venue selected in the combo box	Must see design view method	1
	B6	Button present and suitably labelled e.g. Close		1
	B7	Suitable message would display to say the data has not been saved	Must see design view method	1
	B8	No more than **one** suitable message would appear **ONLY** if changes have been made.	Must see design view method	1
			Total	**8**

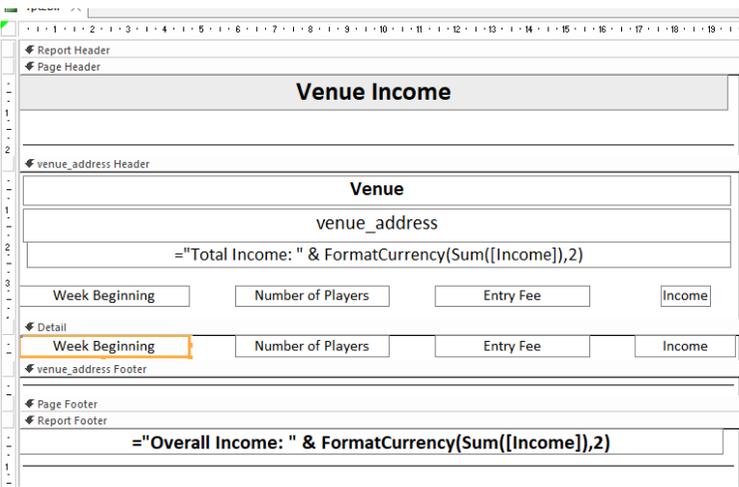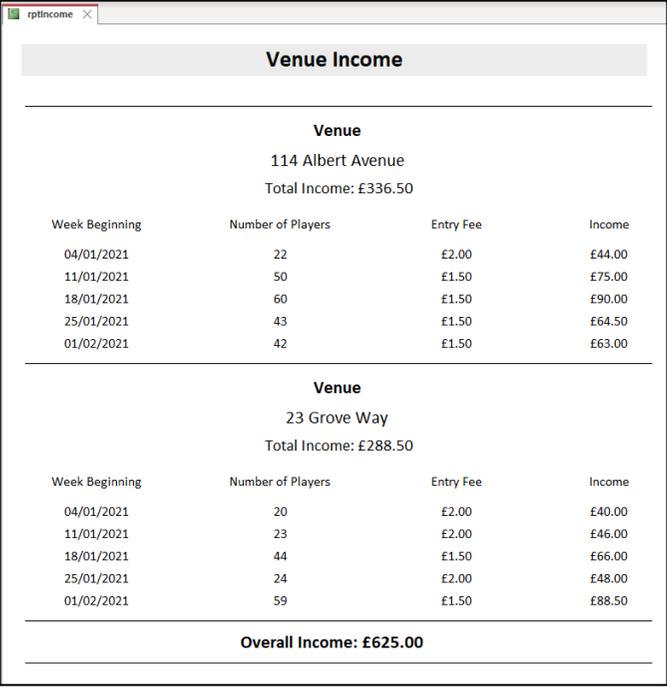| Question number	Answer	Additional Guidance	Mark
1(c)	**Indicative content** *Analysis* - Field called quiz_day in the table. - It is atomic as it only has one day of the week in it. - It has a list check on it that means the user can only select 1 day of the week as the value for it. - Primary key of venue_id cannot be repeated in the table so cannot add another row for a venue that needs quizzes on more than one day. - If the primary key was removed and further rows added for each venue that has quizzes on more than one day there would be redundant data. *Recommendations* - Create a new table called quiz days. - Remove the quiz_day field from the venue table - Have a composite primary key of venue_id and quiz_day so that the venue_id could be repeated as many times as needed so long as the day of the week was different - Could keep the list check on the quiz_day field		9

Level	Mark	Descriptor
	0	No Awardable content
Level 1	1-3	- Analysis is flawed or superficial, containing simple statements that show limited understanding of the subject matter. - Solution may contain some aspects that are appropriate, but is generally ineffective.
Level 2	4-6	- Analysis is sound, containing minor inaccuracies or omissions, showing some understanding of the given issue. - Solution is workable but may have minor issues.
Level 3	7-9	- Analysis is sound and developed, containing ideas that are linked together in a fluent and logical way, showing a thorough understanding of the given issue. - Solution is appropriate and workable.
		Total for question 9

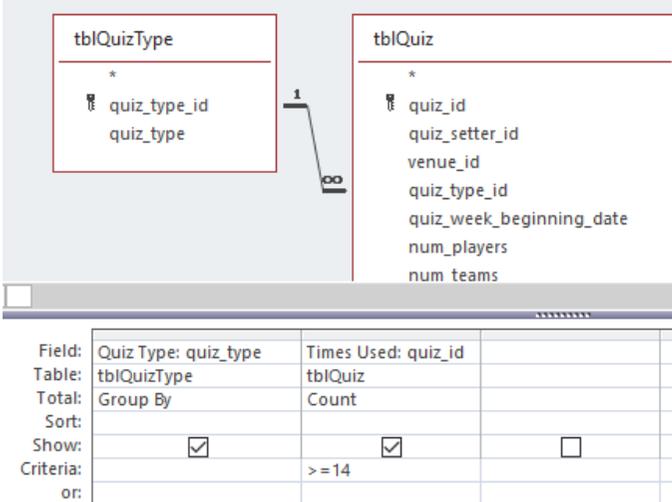| Question number	Answer		Additional Guidance	Mark
1(d)	**Table Structure**			
	D1	Use of appropriate table and field names and naming conventions		1
	D2	Quiz table is present with correct fields	Fields may be named differently	1
	D3	Setter type table is present with correct fields		1
	D4	Quiz type table is present with correct fields		1
	D5	1:M relationship between Setter and Quiz	Relationship must be in the correct direction	1
	D6	1:M relationship between Quiz type and Quiz		1
	D7	1:M relationship between Venue and Quiz		1
	D8	Correct primary key used for Quiz type table	Fields may be named differently	1
	D9	Correct primary key used for Setter table		1
	D10	Correct primary key used for Quiz table		1
	D11	Date/Time is used for quiz_week_beginning_date **And** At least one suitable number field is present • num_players • num_teams	Fields may be named differently	1
			Total	**11**

Question number	Answer			Additional Guidance	Mark
1(e)	**Import**				
	E1	Quiz table – 80 records			1
	E2	Quiz type table – 6 records			1
	E3	Setter table – 11 records			1
				Total	**3**
				Total for question 1	**37**

Question number	Answer		Additional Guidance	Mark
2(a)	**Quiz setter and quizzes set query**			
	A1	Only these fields included in query setter_last_name setter_first_name any field from quiz table to be used as generated field	Design view Accept other fields if tick from **Show** has been removed	1
	A2	Number of quizzes per quiz setter generated	Design view	1
	A3	Number of quizzes generated field has a suitable field name	Design/datasheet view	1
	A4	Number of quizzes sorted into descending order	Design/datasheet view	1
	A5	Columns not truncated including the field headings	Datasheet view	1
	A6	Correct results shown with no duplicates	Datasheet view	1
			Total	**6**
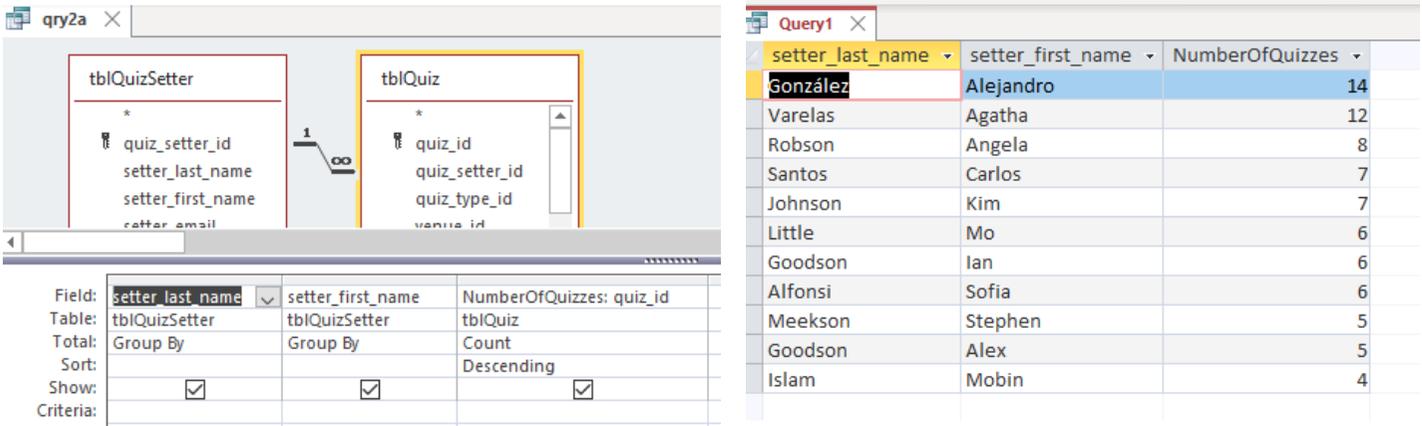
Question number	Answer	Additional Guidance	Mark
2(b)(i)	**Venue income query**		
	B1 **Only** the correct related tables added (venue, quiz)	Must see in the tables in the top part of the query Do not penalise if the relationship between the tables is not shown	1
	B2 Criteria correct for venue_address or venue_id • "23 Grove Way" or "114 Albert Avenue" • 1 or 6	Mark from design view	1
	Calculation for entry fee		
	B3 • 1.5 if the number of players is > 30 **OR** • 2 if the number of players <=30	Mark from design view	1
	B4 • 1.5 if the number of players is > 30 **AND** • 2 if the number of players <=30	Mark from design view	1
	Calculation for income		
	B5 Calculation correct for income: • num_players*entry fee	Mark from design view Follow through on any errors in entry fee	1
		Total	**5**

Question number	Answer	Additional Guidance	Mark
2(b)(ii)	**Venue income report**		
	B6 Title is in the page or report header	Mark from design view only (do not accept title in detail section)	1
	B7 Title is as given	Mark from design or print view Ignore case, ignore minor spelling errors	1
	B8 Grouped by venue	Mark from design view only	1
	B9 Total income for venue uses correct formula e.g. =Sum(Income)	Accept truncation in design view if print view tallies	1
	B10 Total income for overall income uses correct formula e.g. =Sum(Income)	Accept truncation in design view if print view tallies	1

	B11	Total Income calculated in venue header –**view**	Mark from design view only	1
	B12	Overall Income calculated in report footer	Mark from design view only	1
	B13	Monetary values formatted as currency for generated fields	Mark from design or print view	1
	B14	Report is as given	Checking spelling, case, layout etc, truncation vertical/horizontal.	1
			Total	9
			Total for question 2	20

Question number	Answer		Additional Guidance	Mark
3(a)	**Query for Chart**			
	A1	No inappropriate fields included	Mark from design view Must include more than one field Accept extra fields if tick from **Show** has been removed	1
	A2	Times used calculated correctly • Count(quiz_id)	Mark from design view Any field from quiz table is appropriate for the count	1
	A3	Criteria correct for number of times used • >=14 • >13	Mark from design view	1
			Total	3

Question number	Answer		Additional Guidance	Mark
3(b)	**Chart**			
	The chart must be created using database software to achieve any of these marks			
	B1	Bar/column/pie chart created		1
	B2	Meaningful chart title used		1
	B3	Axis shows quiz type (or legend for pie chart)	Must be on the chart itself	1
	B4	Bar/column • At least one axis shows suitable label Pie • Data values are shown	Must be on the chart itself	1
	B5	Bar/column • Axis contains suitable scale • Or data values are shown Pie • Data values are shown	Must be on the chart itself	1

	B6	Chart is fit for purpose Bar/column • No legend • Appropriate sizing of elements on page (e.g. title larger than axis labels, data labels) Pie • Appropriate sizing of elements on page (e.g. title larger than legend labels, data labels)	Ignore case and minor spelling errors Report must show chart only and not any other information	1
			Total	**6**
			Total for question 3	**9**

Question number	Answer		Additional Guidance	Mark
4	**Dashboard**			
	A1	Appropriate heading and at least 2 appropriately labelled buttons	Button labels must be written to help the user e.g. **not** Open query 2(a)(i)	1
	A2	Data edit form would open	Macro/code	1
	A3	Query from 2(a)(i) would run	Macro/code	1
	Number of times quiz type used			
	A4	Message box with appropriate message would appear when button clicked	Macro/code	1
	A5	Chart or query would open depending on the option chosen	Macro/code Must **not** be two separate buttons	1
			Total	**5**
			Total for question 4	**5**

Question number	Answer	Additional Guidance	Mark
5	**Indicative content** *Factors* • Presence check used when the data must be present before the record is saved • Range check used when there is a specific range of values for a field • Lookup check used to lookup data from another table • List check used when there is a specific list of values for a field • Format (picture) check used when a field has exactly the same format for each value • Length of data check used when the length of the data in a field has to be limited *Consideration and significance* Setter table • Presence: setter_last_name and setter_email • Format check: email Quiz type table • Presence: quiz_type field Quiz table • Presence: all non-key fields other than num_player and num_teams (cannot be sure quiz is created after or before the quiz takes place) • quiz_setter_id, quiz_venue_id, quiz_type_id lookup checks. All foreign keys so can lookup to the tables where they are primary keys Range checks would not be suitable in any of the tables. List checks would not be suitable in any of the tables. Length of data checks could be set on all text fields as none would use 255 characters.		9

Level	Mark	Descriptor
	0	No Awardable content
Level 1	1-3	• Applies understanding with limited coherence, showing limited understanding of the given issue. • Assessment of solution is superficial or unbalanced, and judgements lack support from evidence.
Level 2	4-6	• Applies understanding to make some coherent connections, showing some understanding of the given issue. • Assessment of solution is partially developed, but this may be unbalanced, using evidence to support some judgements.
Level 3	7-9	• Applies understanding coherently, showing a thorough understanding of the given issue. • Assessment of solution is balanced and developed, using evidence to support judgements throughout.
		Total for question 9