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**INFORMATION TECHNOLOGY**

**9626/02**

Paper 2 Practical

**October/November 2019**

MARK SCHEME

Maximum Mark: 110

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**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 International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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

**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.

**Video**

Ellmau video	Image ratio of software set to 16:9	1 mark
Title frames	Title background – white	1 mark
	Image ski1.jpg present on left edge	1 mark
	Image ski1.jpg present on right edge	1 mark
	No cropping of both images	1 mark
	Title frame at start with white background	1 mark
	Title 7 seconds duration	1 mark
	Title text <b>Ellmau Kinder-Skischule</b>	1 mark
	Middle centre of screen and clearly visible	1 mark
	Red 60 point sans-serif font	1 mark
	Effect added for title <b>text</b> animation ...	1 mark
	... effect does not hinder readability	1 mark
	... effect added to give sufficient time to read text within 7 secs	1 mark
	Video 1	<b>Skischule1.mp4</b> placed after title frames
End of video cut		1 mark
Only 8 seconds of video remain		1 mark
Video 2	Soundtrack removed from clip	1 mark
	<b>Skischule2.mp4</b> placed after Skischule1	1 mark
	End of video cut so 13 seconds remain	1 mark
	Soundtrack removed from clip	1 mark
Caption	Single 3 second transition effect between 2 videos	1 mark
	Snapshot of last frame extracted in appropriate format	1 mark
	Placed after video clip	1 mark
	Caption frame 7 seconds duration	1 mark
	Caption in visible font with reasonably good contrast	1 mark
	Caption text includes <b>Children's Ski School</b> (or similar)	1 mark
	Caption text includes Learn to ski (or similar)	1 mark
	Caption text includes <b>Ellmau</b>	1 mark
Caption text includes <b>Austria</b>	1 mark	
Credits	Credits frame duration 7 seconds	1 mark
	Filmed by TMBvideo	1 mark
	Location Ellmau	1 mark
	Country Austria	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/exported as SkiSchool_1_ZZ999_9999	1 mark
In mp4 format	1 mark	

**Normalisation**

Describe five benefits of normalisation

Five descriptions from:

- 1 The database does not have redundant data, it is smaller in size so less money needs to be spent on storage
- 2 As there is less data to search through, it is much faster to run a query on the data
- 3 As there is no redundant data there is better data integrity and less risk of mistakes
- 4 As there is no redundant data there is less chance of storing two or more different copies of the data
- 5 One change can be made which can instantly be cascaded across any related records
- 6 Data is grouped logically within the database structure
- 7 Normalised databases only contain atomic data

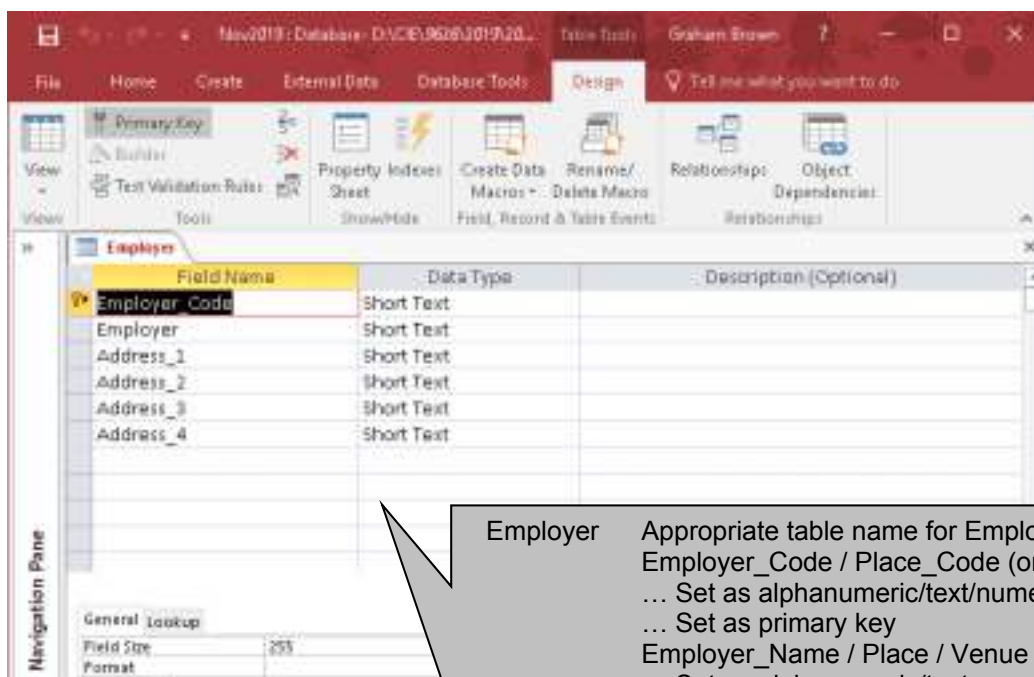
1 mark each Max 5

**Evaluation**

Analyse and evaluate the given dynamic query

Six from:

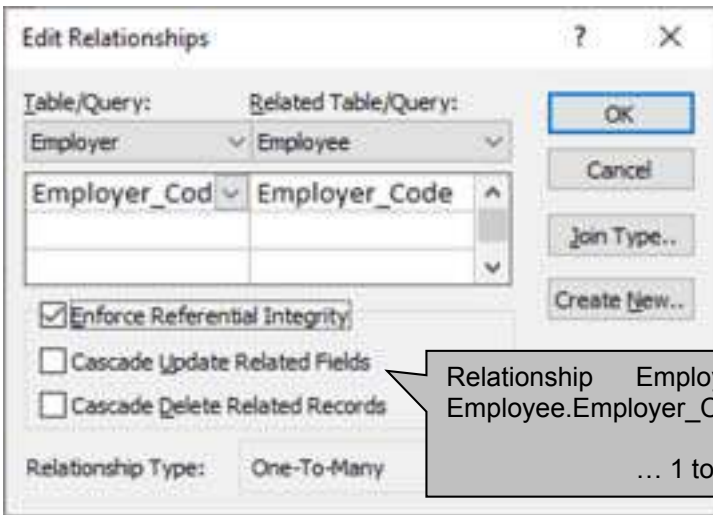
- 1 It is a dynamic parameter query
- 2 It is easier for a user than hard coding the vehicle make, model and fuel type into a static query
- 3 A reason why less user expertise is needed.
- 4 The user only has to complete three dialogue boxes.
- 5 Setting up a query in this way means that it is more flexible than a static parameter query
- 6 It can be used over and over again without having to ever go back into the query design view.
- 7 Using this dynamic query limits the search criteria to only these three fields. 1 mark each Max 6

**Database**

Employer	Appropriate table name for Employer / Place	1 mark
Employer_Code / Place_Code (or similar)	...	1 mark
...	Set as alphanumeric/text/numeric	1 mark
...	Set as primary key	1 mark
Employer_Name / Place / Venue (or similar)	...	1 mark
...	Set as alphanumeric/text	1 mark
Address1 field	...	1 mark
...	Set as alphanumeric/text	1 mark
Address2 field set as alphanumeric/text	...	1 mark
Address3 field set as alphanumeric/text	...	1 mark
Address4 field set as alphanumeric/text	...	1 mark
Short meaningful consistent fieldnames	...	1 mark
Fieldnames contain no spaces	...	1 mark
23 records	...	1 mark
...	with unique data	1 mark



Employees	Appropriate table name for Employee	1 mark
	Surname (or similar)	1 mark
	... Set as alphanumeric / text	1 mark
	Forename (or similar)	1 mark
	... Set as alphanumeric / text	1 mark
	Date_Of_Birth (or similar)	1 mark
	... Set in Date / Time format	1 mark
	Date_Employed (or similar)	1 mark
	... Set in Date / Time format	1 mark
	Job (description)	1 mark
	... Set as alphanumeric	1 mark
	Employer_Code / Place_Name	1 mark
	... Data type matches <i>Employer.EmployerCode</i>	1 mark
	No additional fields	1 mark
	All fieldnames contain no spaces	1 mark
	All fieldnames short, meaningful and consistent	1 mark
	Compound Key set on Name and DOB fields	3 marks
	169 records	1 mark



Relationship	Employer.Employer_Code to Employee.Employer_Code	2 marks
	... 1 to Many	1 mark

Query for report:	Date_Of_Birth	1 mark
	>#31/12/1990#	1 mark
	AND	1 mark
	Date_Employed	1 mark
	<#02/12/2009#	1 mark

Surname	Date_Of_Birth	Date_Employed
Employee	Employee	Employee
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	>#31/12/1990#	<#02/12/2009#

## Awards event 1st December 2019 for younger employees with over 10 years' service

Report prepared by A Candidate ZZ999 9999

### Administration/Office

Skischule  
Skiverleih  
Kinderpiste  
Kapellenweg 8  
6352 Ellmau

Vanessa	Schweiger	25/04/1991	20/04/2009
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### Chambermaid

AktivHotel Hochfi

Dorf 34  
6352 Ellmau

Konstantin	Hofbauer	27/06/1991	21/01/2007
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### Restaurant staff

Lobewein

Dorf 22  
6352 Ellmau

Elias	Polt	15/01/1994	06/09/2009
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### Ski Instructor

Skischule  
Skiverleih  
Kinderpiste  
Kapellenweg 8  
6352 Ellmau

Nicolas	Resch	23/04/1992	05/01/2008
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Mattia	Kaufmann	26/05/1992	12/11/2008
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### Snowboard Instructor

Report:	Appropriate title for report	1 mark
	Largest font, black background with white font	1 mark
	Grouped by job description	1 mark
	Secondary grouping by employer's / place name	1 mark
	... with 4 address lines in secondary group	1 mark
	Detail row contains Forename and Surname	1 mark
	Forename & Surname dark grey background and white sans-serif font	1 mark
	Detail row contains DOB then Date job started	1 mark
	DOB and Date job started grey background and white sans-serif font	1 mark
	Correct 11 records extracted	1 mark

Skischule  
Skiverleih  
Kinderpiste  
Kapellenweg 8  
6352 Ellmau

**Marlene Hofmann** 27/03/1991 12/12/2008

**Trainee Ski Instructor**

Skischule  
Skiverleih  
Kinderpiste  
Kapellenweg 8  
6352 Ellmau

**Nico Posch** 10/08/1992 19/03/2008

**Trainee Snowboard Instructor**

Skischule  
Skiverleih  
Kinderpiste  
Kapellenweg 8  
6352 Ellmau

**Michael Kogler** 18/04/1991 16/05/2008

**Transport Assistant**

Skischule  
Skiverleih  
Kinderpiste  
Kapellenweg 8  
6352 Ellmau

**Marco Posch** 27/01/1991 17/01/2008

**Waiter/Waitress**

Cantina Bar Mexi

Dorf 43  
6352 Ellmau

**Luca Riegler** 12/04/1991 06/07/2009

Sporthotel

Dorf 50  
6352 Saltzberg

**Leon Schober** 14/03/1994 29/09/2009



### Number of trainees working for each employer

Employer	Trainee Chef	Trainee Ski Instructor	Trainee Snowboard Instructor
AktivHotel Hochfilzer	2		
Cantina Bar Mexican	1		
Ellmauer Alm	1		
Gasthof Gründalm	1		
Gipfelalm Hohe Salve	1		
Hotel Alte Post	1		
Skischule		9	7
Sporthotel	1		

Report 2: Wildcard search for Trainee 1 mark  
 Job description as column headings 1 mark  
 Employer names as row headings 1 mark  
 Count as function 1 mark  
 No totals 1 mark  
 Appropriate title 1 mark  
 Gridlines present 1 mark  
 Exported as **Trainee\_ZZ999\_9999.pdf** 1 mark

