
INFORMATION TECHNOLOGY

9626/02

Paper 2 Practical

May/June 2019

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 International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

This document consists of **9** 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
	First 4.8 seconds of video removed	1 mark
	All elements fill the window	1 mark
Title frame/s	Snapshot of first frame extracted	1 mark
	... used at start as background image	1 mark
	... with Ellmau coat of arms added with transparency	1 mark
	... top right of screen and clearly visible	1 mark
	... with appropriate proportions and covers most of light	1 mark
Title text	Title frame with coat of arms 10 seconds duration	1 mark
	Animation effect gives time to read text	1 mark
	Title text Celebrate the New Year with us	1 mark
	Top left of screen and clearly visible	1 mark
Video 1	Large easily read white sans-serif font	1 mark
	Smooth transition into video / no movement	1 mark
	End of video cut	1 mark
Caption	... so only 10 seconds of video remain	1 mark
	Snapshot of last frame extracted	1 mark
	Set as the caption background	1 mark
	Placed after video	1 mark
	Different animation effect for caption	1 mark
	Caption frames 7 seconds duration	1 mark
	Caption in visible font with good contrast	1 mark
	Caption text includes Ellmau & Austria –	1 mark
2nd block includes Fireworks at midnight	1 mark	
Video 2	3rd block includes 31st December 2019	1 mark
	Clip Ellmau2 placed after caption	1 mark
Credits	2-second transition between the caption and the clip	1 mark
	Appropriate transition for credits background	1 mark
	Appropriate background for credits	1 mark
	... placed at end of second video clip	1 mark
	... of 7 seconds duration	1 mark
	Filmed by – <u>GBRvideo</u>	1 mark
	Location – <u>Ellmau</u>	1 mark
	Country – <u>Austria</u>	1 mark
Date filmed – 31/12/2018	1 mark	
	Cand. name & numbers in credits in appropriate format	1 mark
	Appropriate blank line(s) as spacing between credits	1 mark
	Movie saved/exported as Ellmau_1_ZZ999_9999	1 mark
	In mp4 format	1 mark

Audio file Opera.mp3

Audio file	End of clip removed	1 mark
	...cut to 43 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 Opera2_ZZ999_9999.mp3	1 mark

Video File Ellmau_2

Ellmau_2_	Soundtrack added as specified	1 mark
	Movie saved as Ellmau_2_ZZ999_9999.wmv	1 mark

Video File Ellmau_3

Ellmau_3_	Export or conversion as Ellmau_3_ZZ999_9999	1 mark
	In avi format	1 mark

Evaluation:

Evaluation of 2 data files for merging

6 from:

- Most columns in same order and contain same data
- Forename and Surname columns are reversed in 2 data sets
- DOB and Age columns contain different data types
- Age should never be used as a field as it constantly changes
- Where age has been given DOB cannot be calculated
- Address columns all have the same column heading
- Both files contain blank rows which need to be removed
- Both files stored in (unformatted) text format
- Remove header row from second data set as files are merged

1 mark each Max 6

Employees.csv	Merge 2 documents into Employees9999.csv	1 mark
	Remove date of birth and age columns	1 mark
	With data integrity for Forename and Surname intact	1 mark

Forename	Surname
Arne	Bircher
Jon	Haby
Thomas	Tobler
Tim	Frueh
Dekke	Heitz
Simone	Aebi
Luca	Rim
Lara	Forrer
John	Zwinky
Romina	Von Gunten
Arenwald	Wurgler
Julian	Bruster

Sofia	Walp
Arda	Hegler
Nathan	Ganz
Alessandro	Messerli
Luca	Roser
Andri	Jud
Matteo	Nufer
Laura	Haener
Livio	Stager
Giulia	Ramseyer
Noah	Truby
Raphael	Michlig
Luca	Gisi

Matteo	Isch
Alice	Thoeny
Leonardo	Jud
Fabian	Ging
Leon	Joost
Nico	Lichty
Leandro	Laqua
Mattia	Polt
Camille	Oberlin
Matteo	Hilty
Mia	Leupp
Nico	Gantert
Lukas	Lutz

Tobias	Mayer
Maximilian	Leitner
Alexander	Berger
David	Fuchs
Jonas	Eder
Simon	Fischer
Jakob	Schmid
Elias	Winkler
Florian	Weber
Sebastian	Schwarz
Julian	Maier
Paul	Schneider
Felix	Reiter
Fabian	Mayr
Leon	Brunner
Raphael	Wimmer
Philipp	Lackner
Moritz	Wieser
Daniel	Koch
Matthias	Stadler
Luca	Weiss
Nico	Krenn
Niklas	Konig
Michael	Kaiser
Samuel	Bohm
Noah	Mair
Dominik	Hauser
Gabriel	Hofbauer
Benjamin	Kaufmann
Johannes	Winter
Marcel	Riegler
Lorenz	Ortner
Thomas	Hackl
Manuel	Kern
Valentin	Kogler
Jan	Fink
Stefan	Seidl
Konstantin	Maurer
Christoph	Mayrhofer
Matteo	Posch
Leo	Schober
Kilian	Karner
Marco	Reisinger
Clemens	Hofmann

Andreas	Resch
Markus	Fritz
Adrian	Riedl
Martin	Konig
Fabio	Kaiser
Max	Bohm
Oliver	Mair
Jonathan	Hauser
Christian	Hofbauer
Luis	Kaufmann
Nicolas	Winter
Emil	Riegler
Yannick	Ortner
Tim	Hackl
Ben	Kern
Sarah	Kogler
Anna	Fink
Hannah	Seidl
Lena	Maurer
Leonie	Mayrhofer
Julia	Posch
Sophie	Schober
Marie	Karner
Emma	Reisinger
Laura	Hofmann
Johanna	Resch
Katharina	Fritz
Valentina	Riedl
Lea	Konig
Lara	Kaiser
Sophia	Bohm
Mia	Mair
Lisa	Hauser
Jana	Hofbauer
Emilia	Kaufmann
Magdalena	Winter
Amelie	Riegler
Viktoria	Ortner
Elena	Hackl
Clara	Kern
Nina	Kogler
Alina	Fink
Emily	Seidl
Lina	Maurer

Helena	Mayrhofer
Theresa	Posch
Isabella	Schober
Miriam	Karner
Lilly	Reisinger
Selina	Hofmann
Marlene	Resch
Luisa	Fritz
Vanessa	Riedl
Larissa	Strobl
Emely	Holler
Maja	Schwaiger
Anja	Rainer
Jasmin	Neubauer
Pia	Jager
Anna-Lena	Grabner
Annika	Weis
Maria	Hartl
Nora	Friedl
Valerie	Brandstatter
Franziska	Horvath
Lukas	Klein
Arda	Frank
Nathan	Hutter
Alessandro	Mullner
Luca	Unger
Andri	Hager
Matteo	Kofler
Laura	Lindner
Livio	Kainz
Mia	Wiesinger
Tobias	Schweiger
Raphael	Hoffmann
Nico	Sommer
Matteo	Unger
Alice	Hager
Leonardo	Kofler
Fabian	Lindner
Leon	Kainz
Nico	Wiesinger
Leandro	Schweiger
Mattia	Hoffmann
Camille	Sommer

Evidence 8

Alternative solution:

Spreadsheet

1 mark

Advantages of relational database:

4 from:

No duplication of data...

...quicker to edit/amend/delete data

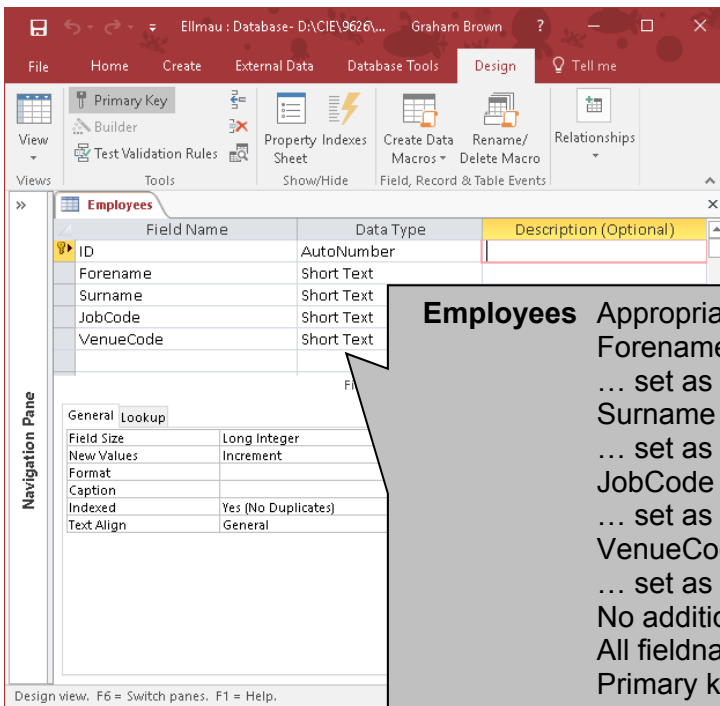
...referential integrity/only need to edit/amend/delete data once ...

...less chance of errors/omissions

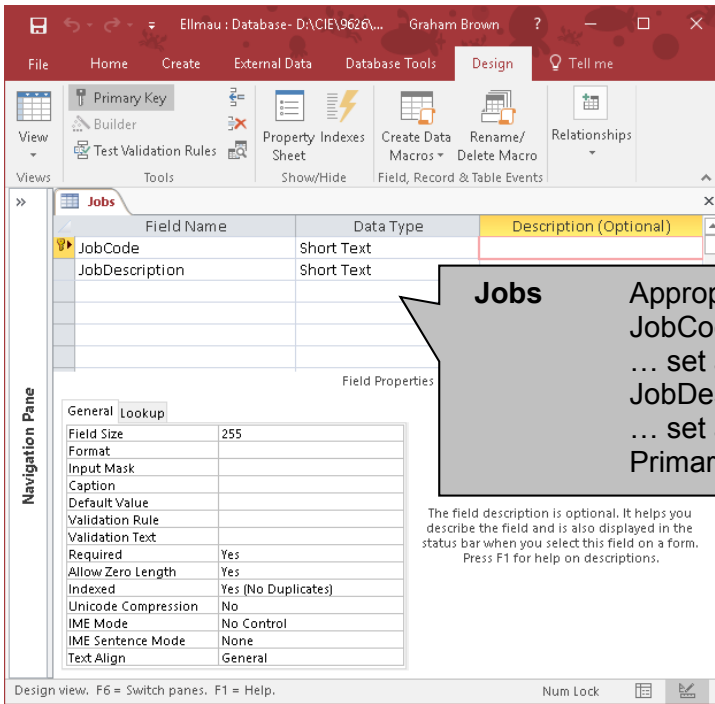
No need for different worksheets/all data in same place

Relational database has more powerful search facilities

1 mark each Max 4



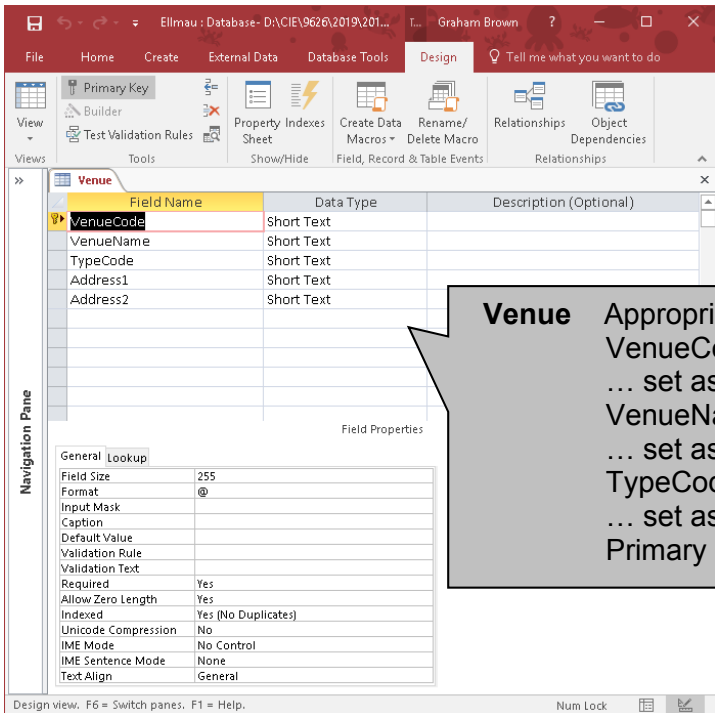
Employees	Appropriate table name: no Ellmau or Nos	1 mark
	Forename (or similar)	1 mark
	... set as alphanumeric/text	1 mark
	Surname (or similar)	1 mark
	... set as alphanumeric/text	1 mark
	JobCode (or similar)	1 mark
	... set as alphanumeric/text	1 mark
	VenueCode (or similar)	1 mark
	... set as alphanumeric/text	1 mark
	No additional fields	1 mark
	All fieldnames short and meaningful	1 mark
	Primary key on ID as Autonumber	1 mark
All tables	All fieldnames contain no spaces or underscores	1 mark



Jobs

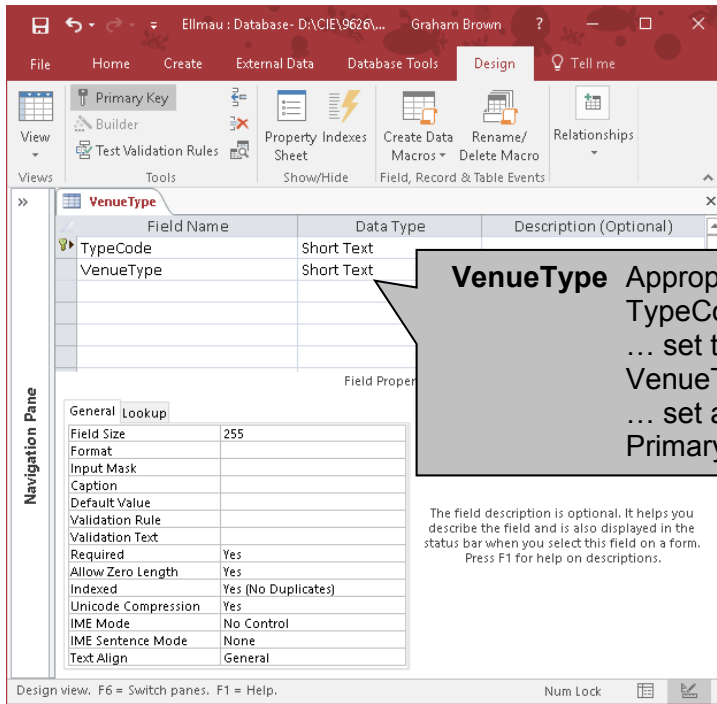
- Appropriate table name: no Ellmau 1 mark
- JobCode (or similar) 1 mark
- ... set as alphanumeric/text 1 mark
- JobDescription (or similar) 1 mark
- ... set as alphanumeric/text 1 mark
- Primary key on JobCode 1 mark

The field description is optional. It helps you describe the field and is also displayed in the status bar when you select this field on a form. Press F1 for help on descriptions.

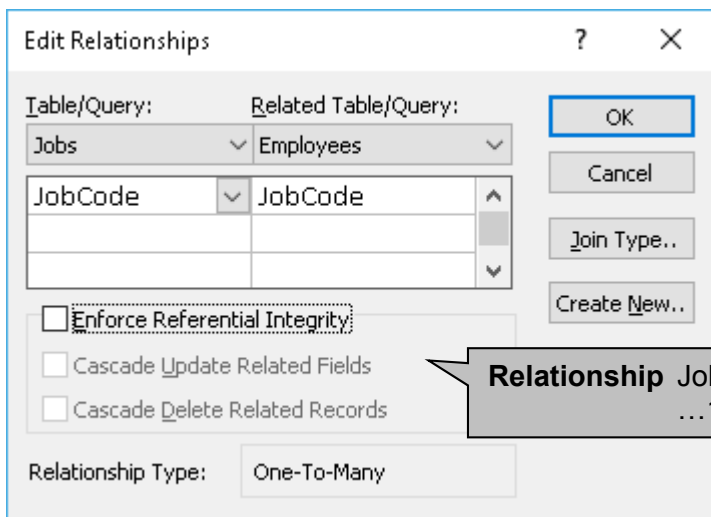


Venue

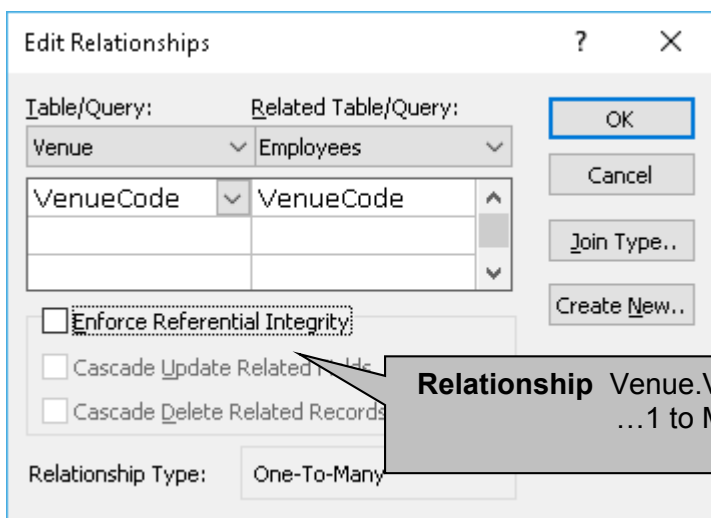
- Appropriate table name: not Ellmau 1 mark
- VenueCode (or similar) 1 mark
- ... set as alphanumeric/text 1 mark
- VenueName (or similar) 1 mark
- ... set as alphanumeric/text 1 mark
- TypeCode (or similar) – not Type as not 3NF 1 mark
- ... set as alphanumeric/text or numeric 1 mark
- Primary key on VenueCode 1 mark



VenueType Appropriate table name 1 mark
 TypeCode (or similar) may be text/numeric 1 mark
 ... set to match data type of Venue.TypeCode 1 mark
 VenueType (or similar) 1 mark
 ... set as alphanumeric/text 1 mark
 Primary key on TypeCode 1 mark



Relationship Jobs.JobCode to Employees.JobCode 2 marks
 ...1 to Many 1 mark



Relationship Venue.VenueCode to Employees.VenueCode 2 marks
 ...1 to Many 1 mark

Edit Relationships ? X

Table/Query: VenueType Related Table/Query: Venue

TypeCode TypeCode

Enforce Referential Integrity

Cascade Update Related Fields

Cascade Delete Related Records

Relationship Type: One-To-Many

Buttons: OK, Cancel, Join Type.., Create New..

Relationship VenueType.TypeCode to Venue.TypeCode 2 marks
 ...1 to Many 1 mark

Chef or Trainee Chef for each venue

VenueName	Address1	Address2	Chef	Trainee Chef
AktivHotel Hochfilzer	Dorf 34	6352 Ellmau	2	2
Alpenpension Claudia	Alte Straße 4	6352 Ellmau	1	
Apparthotel Tom Sojer	Dorf 7	6352 Ellmau	1	
Cantina Bar Mexican	Dorf 43	6352 Ellmau	1	1
Ellmauer Alm	Alte Strasse 4A	6352 Ellmau	1	1
Gasthof Gründalm	Salvenburg 28	6306 Söll	2	1
Gipfelalm Hohe Salve	Wies 28	6306 Söll	1	1
Haus Harmony	Austraße 27	6352 Ellmau	1	
Hotel Alte Post	Dorf 24	6352 Ellmau		1
Hotel Der Bär	Kirchbichl 9	6352 Ellmau	1	
Jauenstation Treichlhof	Dorf 84A	6306 Söll	1	
Kaiserblick	Kirchbichl 5	6352 Ellmau	1	
Kaiserhof	Harmstätt 8	6352 Ellmau	1	
Landhotel Föhrenhof	Auwald 44	6352 Ellmau	1	
Lobwein	Dorf 22	6352 Ellmau	1	
Memory	Dorf 39	6352 Ellmau	1	
Pension Rainer	Dorf 37	6352 Ellmau	1	
Sporthotel	Dorf 50	6352 Saltzberg	2	1
Tanzbodenalm	Salvenburg 6	6306 Söll	2	

Report Chef OR Trainee Chef only 1 mark
 Venue Name and Address as row headings 1 mark
 Job Description (not code) as column headings 1 mark
 Correct counts and gridlines with no totals 1 mark