MODULE N DATABASES AND SQL · N1

Databases: tables, records and fields

Original practice questions · 20 marks · ~25 minutes · Cambridge 0478 syllabus 9.1

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **20 marks**. All data on this sheet is made up.

1

Total: 3 marks

(a) Tick (✓) **one** box in each row to show whether each statement about a single-table database is true or false. **[3]**

Statement	True	False
A field is one row of a table that holds all the data about one item.		
Every record in a table has the same fields.		
Adding a new record to a table also adds a new field to the table.		

2 **Total: 5 marks**

A tool-hire shop uses a single-table database. The table `TOOL` stores details of the tools the shop hires out. `DailyCharge` and `Deposit` are amounts in dollars. `Available` shows whether the tool can be hired today.

ToolCode	ToolName	Category	DailyCharge	Deposit	Available
T01	Hedge trimmer	Garden	12.50	40.00	TRUE
T02	Floor sander	Decorating	28.00	100.00	FALSE
T03	Pressure washer	Cleaning	22.00	75.00	TRUE
T04	Tile cutter	Building	18.00	60.00	TRUE
T05	Wallpaper steamer	Decorating	9.50	30.00	TRUE
T06	Cement mixer	Building	25.00	90.00	FALSE
T07	Carpet cleaner	Cleaning	20.00	50.00	FALSE
T08	Lawn scarifier	Garden	16.00	50.00	TRUE

(a) State the number of fields in the table `TOOL`. **[1]**

(b) State the number of records in the table `TOOL`. **[1]**

(c) Give the name of the field that stores the type of work a tool is used for. **[1]**

(d) Write down the `ToolCode` of **every** tool that has a `Deposit` of 50.00 or more **and** cannot be hired today. **[2]**

3 **Total: 8 marks**

A community orchestra is setting up a single-table database. The table `MUSICIAN` will store this data about each musician:

Item	Data to be stored	Field name
1	a membership number that is different for every musician	
2	the musician's first name	
3	the musician's family name	
4	the instrument the musician plays	
5	the musician's mobile phone number	
6	whether the musician has paid this year's membership fee	

(a) Complete the table above by writing a suitable field name for each item of data. Each field name must be meaningful and must not contain any spaces. **[3]**

(b) Complete the table below with **two** example records that could be stored in `MUSICIAN`. Put the data for each item in the matching column. **[2]**

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6
Record 1						
Record 2						

(c) The orchestra also wants to store the date that each musician joined. State the change that must be made to the design of the table `MUSICIAN`. **[1]**

(d) After the change in part (c), the table stores data about 64 musicians. State the number of fields and the number of records in the table. **[2]**

Fields

Records

4 **Total: 4 marks**

(a) Describe what is meant by a **record** and by a **field** in a database table. Use the table TOOL in Question 2 to give an example of each. **[4]**

Record

Field

Total for this worksheet: 20 marks