

GCSE Computing – A451: Database Test

1. A television set top box contains a database of television channels and programmes.

(a) Describe what is meant by a database.

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..... [2]

Data about television channels are stored in the CHANNEL table. Part of this table is shown below.

ChannelID	ChannelName	ChannelType	Broadcaster	HD
346	ETV News	News	ETV	False
347	Screen One	Movies	ETV	True
349	BLING one	General	Bling	True
350	Vivo	Documentary	ETV	False
351	Nature	Documentary	Bling	False
355	Screen One	Movies	Bling	True

(b) State the primary key for the CHANNEL table and give a reason for your choice

Primary Key [1]

Reason

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..... [1]

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(c) Data about programmes that will be broadcast are stored in the PROGRAMME table. The data about each programme includes the channel on which it would be broadcast.

(i) Explain how a foreign key can be used to connect the PROGRAMME table to the CHANNEL table.

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(ii) Explain why the programme data is stored in a separate table from the channel data.

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.....[3]

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2. A dentist uses a database to store the details of patients and their appointments.

- (a) A database management system (DBMS) is used which includes forms, queries and reports.

Tick one box in each row to show whether each of the following statements best describes a form, a query or a report.

	Form	Query	Report
This can be used to print out all the appointments that the dentist has booked.			
This can be used to enter a patient's details when the patient registers with the dentist.			
This can be used to find out all the appointments that a certain patient has made.			

[3]

- (b) When a patient makes an appointment, the start time of the appointment needs to be validated.

State two validation checks which can be carried out on the start time of the appointment.

Check 1.....

Check 2.....
 [2]

- (c) Justify the use of separate entities to store the patient and appointment data.

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 [3]

3. A hairdresser uses a relational database to keep records of his clients and their appointments. The hairdresser uses off-the-shelf data-handling software to manage the database.

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(a) Describe how the data-handling software can be used to set up the structure of the database, before any data is added.

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(b) State **two** tasks the hairdresser can perform using the data-handling software, once the database is in use.

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2.....
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