

Higher Information Systems

2006 q.4 Relational Databases Attributes

Tayview College stores a copy of each pupil's timetable in the college office. It includes the following data items: Pupil number, Pupil name, Class, Subject.

Identify a *single-valued attribute* from this structure and give a reason for your choice.

(2)

2006 q.5 Relational Databases Attributes

a. State why an *integer* data type is appropriate for storing the height of a mountain in metres. **(1)**

b. State the most appropriate data type for storing a person's height in metres. **(1)**

2007 05a Relational Databases Attributes

KwikShop supermarket stores information about each customer sales transaction. It uses the structure

TRANSACTION(Transaction Number, Till Number, Operator, Item, Price)

a. Identify a *multi-valued attribute* from this structure and give a reason for your choice.

(2)

2007P q.1 Relational Databases Attributes

A local company have set up a database to store details of all car rentals. They use the following structure;

RENTAL (Make, Model, Registration Num, Hirer ID, Hirer Name, Date of Hire)

Identify one *multi-valued attribute* from this structure, giving a reason for your choice.

(2)

2007P q.13 Relational Databases Attributes

Each pupil in a school is identified by a code made up from their initials, their year number and their guidance teacher's initials. For example the 3rd year pupil, Moira Leslie whose guidance teacher is Robin Thomson has the code ML3RT.

Identify **two** problems associated with using this *meaningful identifier* as a primary key.

(2)

2008 02 Relational Databases Attributes

Explain what is meant by a *Boolean* data type. **(2)**

Higher Information Systems

2008P q.8 Relational Databases Attributes

Explain what is meant by a *multi-valued* attribute. Give an example to illustrate your answer. **(3)**

2009P q.3 Relational Databases Attributes

Each member of a skiing club is identified by a code made up from the member's initials, the day and month from their date of birth and their level of competence, for example:

JT2203B

identifies Jamie Thom, born 22/03/1991 and whose competence is Beginner.

Identify **two** problems with this *meaningful identifier* if it is used as a primary key.

2009P q.4 Relational Databases Attributes

Westrick DVD Rental stores information about DVDs rented using the following structure:

RENTAL(Rental No, Member No, Date of Rental, Title, Cost)

a. Identify a *multi-valued* attribute in this entity and give a reason for your choice. **(2)**

Give **one** *domain constraint* that might be applied to the Cost attribute. **(2)**