

Shiraz Khan Bangash

ID = 14539

Section = A

Q1(2)

Data Redundancy

data redundancy occurs when the same piece of data is stored in two or more separate place. Suppose you create a database to store sales record and in that record for each sale you enter the customer address.

Data Integrity:

Data Integrity means the reliability and Accuracy of data. Integrity rules are designed to keep the data consistent and correct.

Q1(3)

Multivalued Attributes. A multivalued attribute of an entity is an attribute that can have more than one value associated with the key entity. For example, a large company could have many divisions, some of them possibly in different cities.

Q1(4)

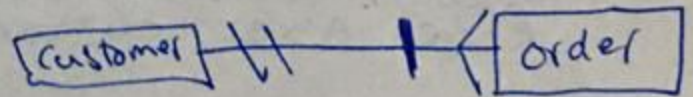
Maintenance in Database have little or not effect on the Data base Application thus reducing the maintenance costs.

Q1(5)

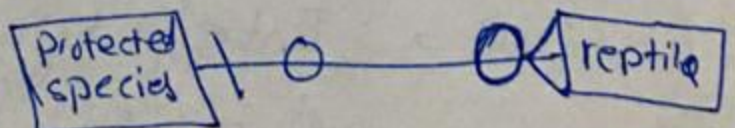
Mandatory one



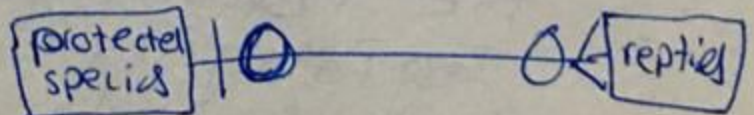
Mandatory many



Optional one



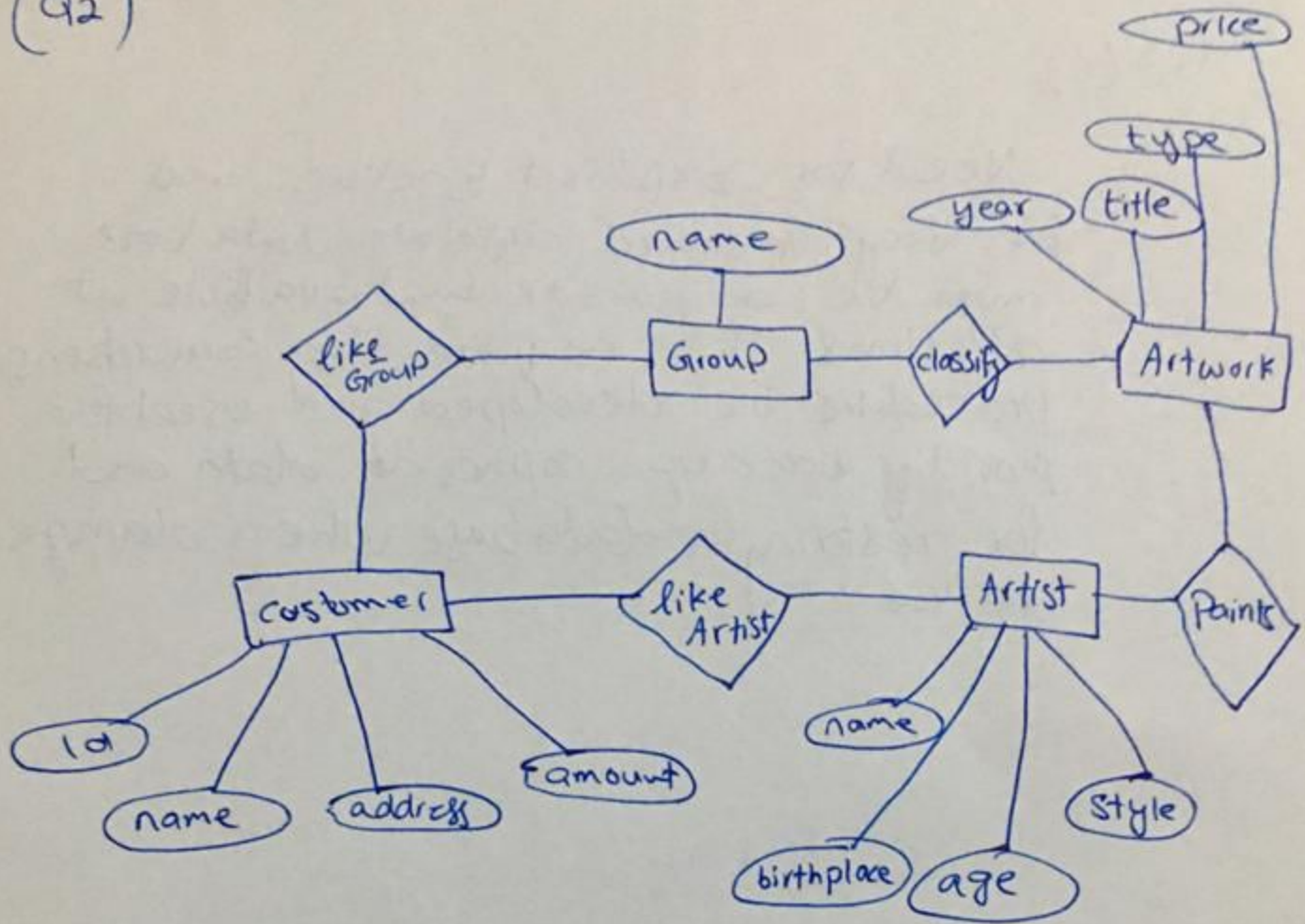
Optional many



Q1(6)

Need for Explicit Backup and Recovery. A shared corporate data base must be accurate and available at all times. This require the comprehensive procedure be developed and used for providing backup copies at data and for restoring a database when damage occurs.

(Q2)



A relational schema corresponding to the above ER diagram is given below

Artist(a-name: string, birthplace: string, age: int, style)

Artwork(title: string, year: int, type: string, price: real)

customer(cust-id: string, c-name: string, address: string, amount)

a_group(g-name: string)

classify(title: string, g-name: string)

like_group(cust-id: string, g-name: string)

Q3

Conceptual Model to Relational Model

