Q. ER Model

Entities: Book, Author, Customer, Order, Publisher.

Relationship, Attributes. to be specified.
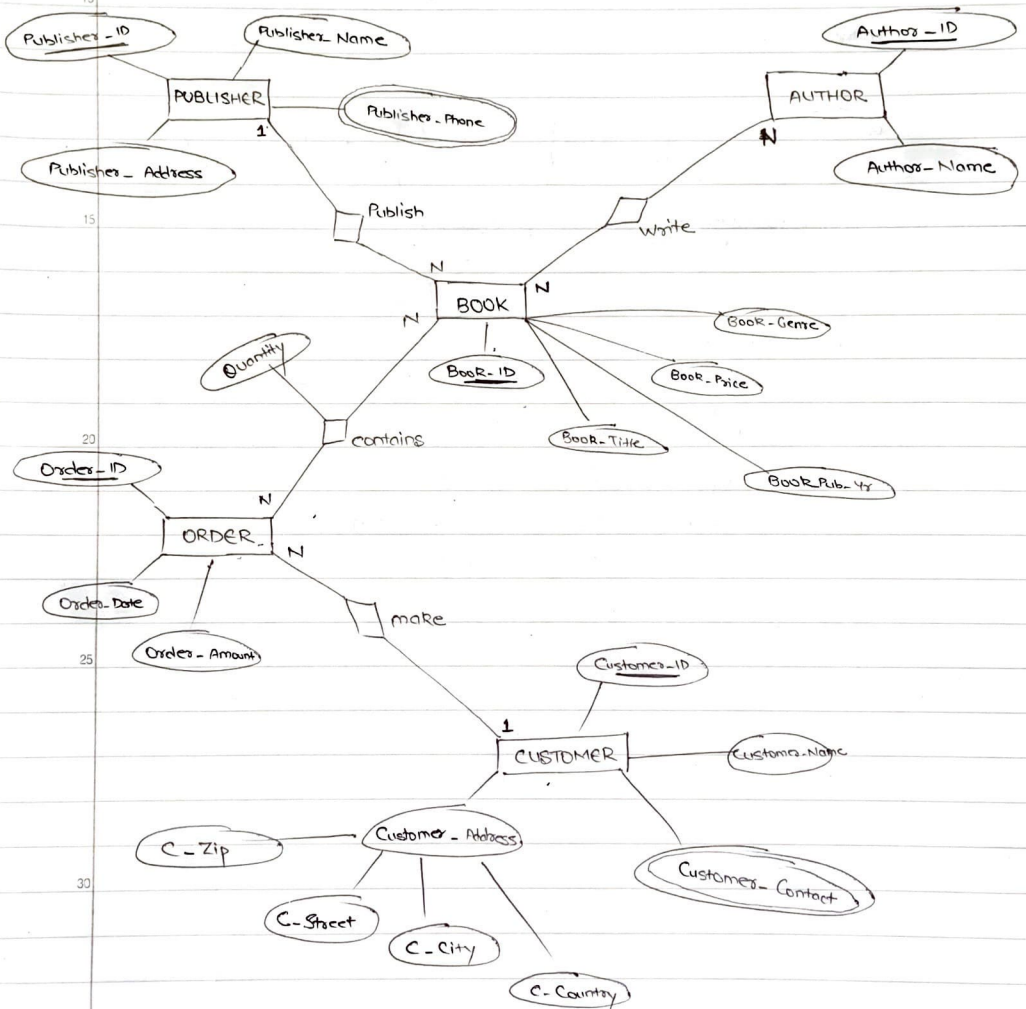
Sol : BOOK — Book-ID, Book-Title, Book-Price, Book-Genre, Book-Pub-Yr

Author — Author-ID, Author-Name.

Order — Order-ID, Order-Date, ~~Order-No~~, Order-Amount

Customer — Customer-ID, Customer-Name, Customer-Address, Customer-Contact

Publisher — Publisher-ID, Publisher-Name, Publisher-Address, Publisher-Phone

INTERPRETATION OF ER DIAGRAM

Date : _____

Book
Book-ID (PK)
Book - Title
Book - Price
Book - Genre
Book - Price
Publisher - ID (FK)

Publisher
Publisher - ID (PK)
Publisher - Name
Publisher - Address
Publisher - Phone

Customer
Customer - ID (PK)
Customer - Name
Customer - Contact
C - Street
C - City
C - Country
C - Zip

Order
Order - ID (PK)
Order - Date
Order - Amount
Customer - ID (FK)

Author
Author - ID (PK)
Author - Name

Writes
Author - ID (FK)
Book - ID (FK)

Contains
Book - ID (FK)
Book- Order - ID (FK)
Quantity

RELATIONSHIPS

(1.) A book can have multiple authors
One author can write many books.]— (Many to many)

(2.) A customer can make many orders (One to many)

(3.) A book is associated with one publisher (Many to One)
A publisher can have multiple books (One to many)

(4.) An order can contain multiple book
A book can be present in multiple orders]- (Many to many)

Customer - Address (Composite Attribute)
Customer - Contact, Publisher - Phone   (Multivalued Attribute)

Tables

In normalized form

(1) BOOK
- BOOK - ID (PK)
- BOOK - Title
- BOOK - Price
- BOOK - Genre
- BOOK - Price
- Publisher - ID (FK)

(2) Customer
- Customer - ID (PK)
- Customer - Name
- C - Street
- C - City
- C - Country
- C - Zip

(3) Customer - Phone
- Customer - ID (PK)
- Customer - Contact (PK)

(4) Publisher
- Publisher - ID (PK)
- Publisher - Name
- Publisher - Address

(5) Publisher - Phone
- Publisher - ID (PK)
- Publisher - Phone (PK)

(6) Author
- Author - ID (PK)
- Author - Name

(7) Order
- Order - ID (PK)
- Order - Date
- Order - Amount
- Customer - ID (FK)

(8) Writes
- Author - ID (FK)
- BOOK - ID (FK)

(9) Contains
- Book - ID (FK)
- Order - ID (FK)
- Quantity.