1. **You are asked to create the above given relational model using SQL language and based on the different mentioned constraints.**

**Answer :**

**Table Product :**

CREATE TABLE Product (

Product\_id VARCHAR2(20) CONSTRAINT <Primary key> PRIMARY KEY,

Product\_name VARCHAR2(20) CONSTRAINT <NOT NULL> NOT NULL,

Price NUMBER CONSTRAINT <Positive value> CHECK (Price > 0)

);

**Table Customer :**

CREATE TABLE Customer (

Customer\_id VARCHAR2(20) CONSTRAINT <Primary key> PRIMARY KEY,

Customer\_name VARCHAR2(20) CONSTRAINT <NOT NULL> NOT NULL,

Customer\_Tel NUMBER

);

**Table Orders :**

CREATE TABLE Orders (

Customer\_id VARCHAR2(20),

Product\_id VARCHAR2(20),

Quantity NUMBER,

Total\_amount NUMBER,

CONSTRAINT <Foreign key> FOREIGN KEY (Customer\_id) REFERENCES Customer (Customer\_id),

CONSTRAINT <Foreign key> FOREIGN KEY (Product\_id) REFERENCES Product (Product\_id)

);

**2-After creating tables, write SQL commands to:**

* **Add a column Category (VARCHAR2(20)) to the PRODUCT table.**
* **Add a column OrderDate (DATE)  to the ORDERS table which have SYSDATE as a default value.**

# **Table Product :**

CREATE TABLE Product (

Product\_id VARCHAR2(20) CONSTRAINT <Primary key> PRIMARY KEY,

Product\_name VARCHAR2(20) CONSTRAINT <NOT NULL> NOT NULL,

Price NUMBER CONSTRAINT <Positive value> CHECK (Price > 0)

);

ALTER TABLE Product ADD Category VARCHAR2(20);

# **Table Orders :**

CREATE TABLE Orders (

Customer\_id VARCHAR2(20),

Product\_id VARCHAR2(20),

Quantity NUMBER,

Total\_amount NUMBER,

CONSTRAINT <Foreign key> FOREIGN KEY (Customer\_id) REFERENCES Customer (Customer\_id),

CONSTRAINT <Foreign key> FOREIGN KEY (Product\_id) REFERENCES Product (Product\_id)

);

ALTER TABLE Orders ADD OrderDate DATE DEFAULT GETDATE()