

## University of Central Punjab

porated by Ordinance No. XXIV of 2002 promulgated by Government of the Punjab, FACULTY OF INFORMATION TECHNOLOGY

## **Introduction to Database Systems**

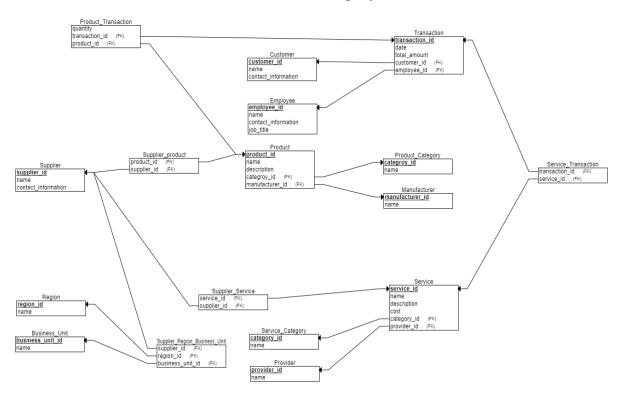
## **Assignment 2**

**Total Marks: 25** 

## **Submission:**

- 1. Submit the Hardcopy of your assignment.
- 2. The deadline for hardcopy is Tuesday May 2, 2023 before lab.
- 3. No late and retake submissions will be entertained, otherwise there will be plenty of deduction in marks.

Below is the Relational Schema of a Manufacturer Company.



Perform the following queries on above schema.

1. Create a new table called "Order\_Item" with columns "order\_item\_id" (primary key) and "quantity".

- 2. Modify the table "Order\_Item" by adding the columns "transaction\_id" (foreign key referencing Transaction.transaction\_id), "product\_id" (foreign key referencing Product\_product\_id), "service\_id" (foreign key referencing Sevice.service\_id).
- 3. Add a new column called "unit\_price" to the Products table.
- 4. Create a new table called "Product\_Review" with columns "review\_id" (primary key), "product\_id" (foreign key referencing Product\_product\_id), "customer\_id" (foreign key referencing Customer\_customer\_id), "rating" and "review\_text".
- 5. Rename the "Supplier\_Product" table to "Product\_Supplier".
- 6. Change the data type of the "date" column in Transaction table from DATE to DATETIME.
- 7. Set the default value of the "rating" column in Product\_Review table to 0.
- 8. Insert a new record into the Employee table with employee\_id = 456, name = "Jane Doe", contact\_information = "456 Elm St, Anytown, USA", and job\_title = "Sales Manager".
- 9. Update the "unit\_price" of all products in the **Electronics** category to increase by 10%.
- 10. Delete all reviews have "rating" less than 3.
- 11. Delete all the products with a "unit\_price" less than \$5.
- 12. Update the "total\_amount" of all transactions by adding 5% discount for customers with a "customer id" of 3.
- 13. Delete all rows from "Service\_Transaction" table where the "service\_id" is not in the **House Keeping** or **Maintenance** categories.
- 14. Retrieve the names and total transaction amounts for all the transactions in the month of January.
- 15. Retrieve the names and transaction dates of all transactions between January 1, 2022 and March 31, 2022.
- 16. Retrieve the names and descriptions of all products that have been reviewed by customers with a rating of 3 or higher.
- 17. Add a new column "in\_stock" (BOOLEAN) to the product table.
- 18. Retrieve all data of service provided by **ABC Services**.
- 19. Retrieve the information of the products that have not been sold in the past month and currently in stock.
- 20. Retrieve the names and costs of all the services that have been provided by provides in the "House Keeping" and **Electronics** categories.
- 21. Retrieve the names and job titles of all employees who were hired in 2022.
- 22. Retrieve the names and job titles of all those employees who worked on transactions involving products in the **Home Goods** Category order by names.
- 23. Retrieve distinct customer id and customer name who have made transactions in April 2022 order by customer id.
- 24. Retrieve the names and contact information of all the suppliers who supply products that are currently out of stock.
- 25. Retrieve the information of all products and services that cost more than \$500.
- 26. Drop the "Product\_Review" table from the database.