Assignment Questions: SQL Queries (Without Joins and Subqueries)

Table Information Recap:

- **customer**: cID (char(8), PRI), cName (varchar(50), NOT NULL), cSection (char(6), NULL), cEmail (varchar(100), UNI, NOT NULL)

- **product**: pID (char(6), PRI), pName (varchar(50), UNI, NULL), pBrand (varchar(50), NOT NULL), pCategory (varchar(20), NOT NULL)

- **sales**: oID (char(6), PRI), cID (char(8), NULL), pID (char(6), NOT NULL), shipping (varchar(10), NOT NULL)

Questions:

SELECT Queries

1. Write a query to retrieve all columns from the customer table.

2. Write a query to select only the pName and pCategory from the product table.

3. Write a query to display all records from the sales table where the shipping status is 'Delivered'.

4. Write a query to fetch the cName and cEmail of customers whose cSection is 'A101'.

5. Write a query to select all products where the pCategory is 'Electronics'.

6. Write a query to retrieve the oID and pID from the sales table where pID starts with 'P1'.

7. Write a query to display all customers whose cEmail ends with '@gmail.com'.

8. Write a query to fetch all products where the pBrand contains the word 'Tech'.

9. Write a query to select all records from the customer table where cSection is NULL.

10. Write a query to retrieve the first 5 records from the product table.

WHERE Clause with Logical Operators

11. Write a query to select all customers where cName starts with 'A' and cEmail contains 'yahoo'.

12. Write a query to fetch products where pCategory is 'Clothing' or 'pBrand` is 'Nike'.

13. Write a query to display all sales records where shipping is not 'Pending' and pID does not start with 'P2'.

14. Write a query to select customers where cSection is either 'B202' or 'C303' and cName does not contain 'Smith'.

15. Write a query to retrieve products where pName is not NULL and pCategory is not 'Furniture'.

Sorting (ORDER BY)

16. Write a query to display all customers sorted by cName in ascending order.

17. Write a query to fetch all products sorted by pCategory in ascending order and pBrand in descending order.

18. Write a query to select all sales records sorted by oID in descending order.

19. Write a query to retrieve all customers whose cEmail contains 'outlook' and sort the results by cSection in ascending order.

20. Write a query to display all products where pBrand starts with 'S' and sort by pName in descending order.

UPDATE Queries

21. Write a query to update the shipping status to 'Shipped' in the sales table where oID starts with 'O1'.

22. Write a query to update the cSection to 'D404' for all customers whose cEmail ends with '@hotmail.com'.

23. Write a query to set pName to 'Unknown' for all products where pName is NULL.

24. Write a query to update the cSection to NULL for customers whose cName starts with 'Z'.

25. Write a query to change the pCategory to 'Accessories' for all products where pBrand is 'Apple'.

LIKE and Pattern Matching

26. Write a query to select all customers whose cName contains exactly 5 characters.

27. Write a query to fetch products where pName starts with 'L' and ends with 'e'.

28. Write a query to display all sales records where shipping starts with 'P' and the third character is 'n'.

29. Write a query to retrieve customers whose cEmail has 'test' in the middle (not at the start or end).

30. Write a query to select products where pCategory ends with 'ics' (e.g., 'Electronics', 'Appliances').