INSTITUTE OF TECHNOLOGY TRALEE



Database Concepts

Assessment 01 – October 2014

Consider the following relational schema:

Stock (StockID, Description, CostPrice, SalePrice, Qty)
Customers (CustID, Surname, Forename, Email, RegDate, Balance)
Orders (OrdID, OrdDate, OrdValue, CustID)
OrderItems (OrdID, StockID, Qty, UnitPrice)

Where all dates are of the format dd/mm/yyyy.

Write SQL queries to:

- 1. Create the table OrderItems. Use appropriate data types/sizes.

 Define the primary key and any required foreign keys as table level constraints. (5 marks).
- 2. Update the SalePrice of all stock by 5%. (3 marks).
- 3. Add a customer to the table Customers. Use data of your own choosing. (3 marks).
- 4. List customer surname, forename and balance for all customers who owe more than €750. List the data in descending order of balance. (3 marks).
- 5. List StockID, Description, SalePrice and SalePrice with 20% reduction. Use a column alias for the reduced SalePrice values. (3 marks).
- 6. List all customers whose surname begins with the letter 'L'. (2 marks).
- 7. List all customers who registered in June 2012. (3 marks).
- 8. Show the total amount of money owed by customers. (3 marks).
- 9. Show the smallest, largest and average order value. Use column aliases for output columns. (4 marks).
- 10. For each customer, show the CustID and the total amount of all orders placed. (5 marks).
- 11. For all orders, show OrdID, CustID, OrdValue, Surname and forename. (5 marks).

- 12. For all orders, show OrdID, OrdDate, StockID and description of each item ordered. (6 marks).
- 13. List all orders whose OrdValue is less than the average order value. (4 marks).
- 14. List all orders placed between 1st Jan 2013 and 30 June 2014. (3 marks).
- 15. List OrdID, OrdDate and customer surname and forename for all orders placed in 2013 with an order value greater than €1000. (6 marks).
- 16. List The OrdID and number of different items ordered for each order. (4 marks).
- 17. List the stockID and total quantity of that stock sold. Display the data in descending order of total quantity sold. (6 marks)
- 18. List all customers who have never placed an order. Use an outer join.(6 marks)
- 19. List all stock which has never been ordered. Use the IN operator. (5 marks).
- 20. List the StockID and description for all stock which has sold more than 100 items. (6 marks).