School of Information Technology and Engineering
Department of Information Technology
B. Tech. (IT)
Database Management Systems (ITE1003)
Model Question Paper
Lab Final Assessment Test – November 2019

Duration: Ninety Minutes **Maximum Marks: 50**

Instructions: *Take screen shots of create table statement, data present in each table, SQL queries along with their output and source code for question 5 and 6 and their test results.*
Write down one SQL statement each for question 1, 2 and 3, write down all the SQL queries of question 4 and the answer of question number 5 and 6 on the answer sheet.

1. Consider the following relational database schema. The primary keys are underlined. The foreign keys are self-explanatory.

ORDER(Order_id, Order_date, Customer_contact_number)

PRODUCT_ORDERED(Order_id, Product_id, Quantity)

PRODUCT(Product_id, Name, Description, Unit_price, Expiry_date)

Write down and test the necessary SQL statements for creating the above tables with necessary primary keys and foreign keys. (10)

2. Write down the necessary SQL statement to specify the constraints that (i) the product id must start with either an *A* or with *EA* or *JW* and (ii) unit price of a product cannot be negative. (5)

3. Enter at least one row *interactively* into each table and display the content of the tables. (5)

4. Write down and test SQL statement to perform the following.

(a) Display product name, product description and total quantity of the product sold so far for each product in descending order of quantity sold. (3)

(b) Display order id and bill amount of each order in ascending order of bill amount. (3)

(c) Display product name for which there was no order of quantity higher than 10. (3)

(d) Display product name for which was no order for the last two months. (3)

(e) Use nested query to display order date and order status of orders for product with unit price higher than Rs.100 and product description has a keyword *sports*. (3)

5. Implement and test a PL/SQL procedure to display the monthly salary of an employee based on her/his id and display a message according to the following rule.

If the salary is higher than Rs.200000/-, then display the message *Salary is high*, otherwise, display the message *Salary is low*. You may assume that the employee table has three columns namely, employee id, employee name and salary. (7)

6. Implement and test a PL/SQL block to read the value of length and breadth of a rectangle from a table and compute and display the area and perimeter of the rectangle and store an identification number, area of the rectangle and its perimeter into another table. (8)