**CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING**



**Advanced Computing Training School**

**Course Name:** e- Diploma in Advanced Computing

**Batch:** March 2022

**Module Name:** Database Technologies Lab Exam

**Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks**

**PRN No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Section 1: (10 marks – each for 1 mark)

1. Display employee information in ascending order of Month Name of hiredate.
2. Write a query to fetch ALTERNATE records from a EMP table. (ODD Numbered Record).
3. Calculate the avg, min and max salary of those groups of employees having the job as CLERK or MANAGER.
4. Display the name of job where least number of persons are working.
5. Write an SQL command that displays 2nd lowest salary paid.
6. Write a query to display ename, job, sal and comm, if the comm is null then display “No commission”.
7. Find department-wise average salary where more than three employees are working.
8. Display all employees whose salary is more than 'ADAMS' salary.
9. Display all employees whose salary > lowest salary and sal < highest salary of all employees.
10. Display in which year max employee have joined.

Section 2: (30 marks – each for 15 marks)

* Write a procedure the print all employee details using cursors.
* Create a new table called STUDENT having following columns (studentID, namefirst, namelast, DOB, and emailID). Write a function names myAutoNumber to return auto generate number and use that number as studentID and insert the value in studentID column. Check if namefirst and namelast is already present in the table, then display a message “Student exists”.

**Evaluation of Lab Exam should be based on the following criteria**

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max**  **Marks** | **Marks**  **Obtain** |
| **Algorithm** | **Documentation of Algorithm and Flowchart** | **2** |  |
| **Program adheres to the algorithm and flowchart** | **2** |  |
| **Efficiency** | **Program is using only the required number of variables**  **/conditions/loops/pointers etc and is optimal** | **2** |  |
| **Correctness** | **The program produces desired output for a given input** | **25**  **5** |  |
| **The program handles all valid and Invalid inputs** |  |
| **Software**  **Engineering**  **Principles** | **The program has meaning variable/function names** | **2** |  |
| **The program is commented properly (At least 20% of the**  **code should be commented)** | **2** |  |
|  | ***Total Marks*** | **40** |  |
| cccccccc |  |  |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Signature of Student** **Signature of Evaluator** **Signature of Coordinator**

**Page 1 of 1**