# Course Name: PG-DAC Batch: Feb 2025

# Module Name: Database Technologies [Set 1] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question 1 to 5 - 2 marks each**

1) Display the second lowest marks scored by any student in 10th.

2) Display all job names with 2nd highest salary for every job (use EMP table) .

3) Print the date, One month and 15 days after today’s date.

4) Display all student information whose name starts with 'S' and its length of name is 6 or more char.

5) Display all student details whose DoB is same as studentID 7.

**Section B: 20 Marks (10 marks each)**

1. Write a function named **myAutoString** to return auto generate string of 6 characters and store them in table X (id varchar(100)). If the auto-generated string is already present in the base table X, then return **‘String Found’** using global variable.
2. Create a stored procedure PrintEvenNumbers(IN N INT) that prints even numbers up to N using a LOOP.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Feb 2025

# Module Name: Database Technologies [Set 2] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A:  Question no 1 to 5 : 2 marks each**

1)  List nameFirst, nameLast, and emailID of student whose studentID is not 5, 10, 15, display first 7 rows only.

2)  List all student details and student\_qualification whose college is in ‘New York’.

3)  List all student details and student\_qualification whose have done “BE” from “Florida” college.

4)  Write a query to create new table by the your name having the following attributes and constraints (\_id int auto increment, ename varchar(20) with not null, phone int with unique, salary int with salary more than 5000, and city varchar(20) with default value as ‘Baroda’)

5) Find the student details that have scored highest marks in 'BE'.

**Section B:  20 Marks﻿ (10 marks each)**

1. Write a Stored Trigger to add record in student table. If the entered nameFirst is passed in lower case convert them in capital case and if DoB>NOW() the recode must not be inserted in to the student base table.
2. Create a stored procedure DeleteStudent(IN \_studentID INT) that deletes the student from STUDENT table. IF student doesn’t exist in the STUDENT table then print a message **"Student not present"**.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Feb 2025

# Module Name: Database Technologies [Set 3] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 5: 2 marks each**

1. Write a query to fetch ALTERNATE records from an EMP table. **(only ODD Records).**

2. Display the student detail that has joined the same batch of the student ‘Saleel’.

3. Display all students who have taken admission in more than 2 batches.

4. Display all courses where least number of students has taken the admission.

5. Display the 3rd highest salary from EMP table(use EMP table).

**Section B:  20 Marks (10 marks each)**

1. Write **studentSearch** Stored Procedure. Pass studentID as parameter, if the entered studentID is present in the STUDENT table then display his qualification details **(Using cursor)**. If the studentID is not present then display the message **“Student not found”**.
2. Create a stored procedure GetTotalMarks(IN student\_id INT, OUT total\_marks int) that calculates the total marks of (10th + 12th + BE) for a student.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Feb 2025

# Module Name: Database Technologies [Set 4] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 5: 2 marks each**  
  
1)    Get student nameFirst with how many characters are there in their nameFirst.  
  
2)    Get (nameFirst, nameLast and last 3 letters of nameFirst) for all students.  
  
3)    Display all students with their voting rights, if the student is below 1980 then print the message **“\*The student can vote”** else print **“The student cannot vote”**.  
  
4)   Display students nameFirst, nameLast, and DoB who have not having any type of cards.   
  
5)    Write a query to create identical table (with your name) of student table includes all the key (e.g. Primary key,..) .  
  
  
**Section B: 20 Marks (10 marks each)**

1. Write **studentDelete** Stored Procedure to delete student record from student table. If the entered studentID is present in the STUDENT Table display the student details and then delete the record and print message **“Student deleted!”**, if the student is not present print message **“Student not found”**.
2. Create a stored procedure GetAllStudent() that retrieves all records from the student table **using cursor**.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

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## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Feb 2025

# Module Name: Database Technologies [Set 5] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 5: 2 marks each**  
1)    Get student nameFirst with how many characters are there in their nameFirst.  
  
2)    Get (nameFirst, nameLast and last 3 letters of nameFirst) for all students.  
  
3)    Display the difference between the salary of ‘SMITH’ and ‘JONES’ (use EMP table).   
  
4)    Write a query to display the student data following format

**(Bhoopali Nanadikar and emailID is bhoopali.nanadikar@gmail.com)**  
      
5)    Display nameFirst and count how many ‘A’ char in appearing in their names.

**Section B: 20 marks (10 marks each)**

1. Write **studentDisplay** Stored Procedure to display all the student from newStudent table. If the newStudent table in not existing then create a new table by the name ABC(\_id int, nameFirst varchar(20), salary int))
2. Write an INSERT trigger on ABC table and perform the following cases.

Case 1: nameFirst must be converted in Title Case.

Case 2: nameFirst must be of minimum of 6 characters.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

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## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Feb 2025

# Module Name: Database Technologies [Set 6] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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

# 

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 5: 2 marks each**

1)    Display the count of modules taught in ‘PD-DAC’ course.

2)    Display student nameFirst and how many characters are there in their emailID.

3)    Display (nameFirst and DoB) for all students, and print then rows in following format.

**e.g. ‘’deep was born in the month of August“.**

4)    Display all students with their voting rights, if the student is below 1980 then print the message **“\*The student can vote”** else print **“The student cannot vote”.**

5)    Display the student name and phone details where student ID is 7.

**Section B: 20 Marks (10 marks each)**

1. Write Stored Function named FN1() to accept your name and display your name in following format.

**INPUT: FN1(‘VASANT‘)**

**OUTPUT: V-A-S-A-N-T**

1. Write a trigger to prevents deletion of student record from student table

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## Signature of Student Signature of Evaluator Signature of Coordinator