



Course Name: PG-Diploma in Advanced Computing

Batch: March 2022

Module Name: Database Technologies

Date: _____

Student Name: _____

Max Marks: 40 Marks

PRN: _____ **Roll no:** _____

Duration: 2 Hours

All questions are mandatory

Q1) Write appropriate query statements to achieve the following:-

1. Display details of the Workers who have joined in Jan. 2014 and working in HR.
2. Display the worker details whose salary is more than 100000 and less than 500000 after giving 20% increment.
3. Display the worker details whose salary is less than average salary of Sales department.
4. Display the worker details who are working as a Manager.
5. Find employees in worker table who have the same salary.
6. Display average bonus given to HR department
7. Find departments along with the total salaries paid for each of department, whose total salary is more than 300000.

Q.2) Write appropriate MongoDB query statements to achieve the following:-

1. Find all books with pageCount is either 200 or 350 or 580
2. List all the books which has thumbnailUrl key
3. Overwrite author "Magnus Rydin" with name "Raymond"

Q.3) Write a stored procedure which accept the Workers department and calculate salary Grade for that department Workers as per following.

Salary	Grade
<100000	D
>=100000 and <200000	C
>=200000 and <500000	B
>=500000	A

Display WORKER_ID, FIRST_NAME, LAST_NAME, SALARY, GRADE, DEPARTMENT

Of all workers in that department.

Q.4) Write a function that will accept inches and convert that inches into yards, feet and remaining inches.

(1 yard = 36 inches) (For example 279 inches send to function, it will return 7 yards, 2 feet, 3 inches).



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Evaluation of Lab Exam should be based on the following criteria

Criteria	Details	Max Marks
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	20
	The program handles all valid and invalid inputs	
Software Engineering Principles	The program has meaningful variable/function names	2
	The program is commented properly (At least 20% of the code should be commented)	2
Viva	Questions based on the lab test	10
	Total Marks	40

Signature of Student

Signature of Evaluator

Signature of Coordinator