PRN:		Course Code	P72PC103

First Year M.C.A. Semester End Examination Winter 2024

Advance Database Concepts

000386

Day and Date: Wed - 4 DEC 2024 Max Marks: **50**

Time: 10:30AM To 12:30PM Duration: **02** hrs

Instructions: 1) All questions are compulsory.

Q.1	**Attempt the following.**	Marks	Bloom's Level	CO
a)	**SELECT** _____ **FROM** instructor **WHERE** dept name= 'Comp. Sci.'; Which of the following should be used to find the mean of the salary ? a) Mean(salary) b) Avg(salary) c) Sum(salary) d) Count(salary)	01	2	1
b)	If we do want to eliminate duplicates, we use the keyword _____in the aggregate expression. a) Distinct b) Count c) Avg d) Primary key	01	2	1
c)	A stored procedure in SQL is a_____ a) Block of functions b) Group of Transact-SQL statements compiled into a single execution plan. c) Group of distinct SQL statements. d) None of the mentioned	01	2	2
d)	Which of the following command can be used to raise an exception explicitly by a user? a) RISED b) RAISED c) RISE d) RAISE	01	2	2

e)	Which of the following syntax is correct for raising an exception explicitly?
	a) **IF** condition **THEN**
	RAISE exception_name;
	END IF;
	b) **IF** condition
	RAISE exception_name;
	END IF;
	c) **IF** condition **THEN**{
	RAISE exception_name};
	END IF;
	d) **IF** condition **THEN**(
	RAISE exception_name);
		01	3	3

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		END IF;			
	f)	SQL Server static cursors are always _____ a) Read-only b) Write-only c) Read, Write d) None of the mentioned	01	3	3
	g)	The _____ contains a list of pages that have been updated in the database buffer. a) Dirty page table b) Page table c) Dirty redo d) All of the mentioned	01	3	4
	h)	A lock that allows concurrent transactions to access different rows of the same table is known as a a) Database-level lock b) Table-level lock c) Page-level lock d) Row-level lock	01	3	4
	i)	Which refers to a property of computer to run several operations simultaneously and possible as computers await response of each other a) Concurrency b) Deadlock c) Backup d) Recovery	01	4	4
	j)	Which of the following is not a property of a transaction? a) Atomicity b) Simplicity c) Isolation d) Durability	01	4	4
Q.2		**Attempt the following.**			
	a)	Explain Integrity Constraints with a suitable example.	05	2	1
	b)	Describe DBMS and various types of DBMS	05	2	2
		OR			
	b)	Write a PL/SQL to enter two numbers a and b to find the value of a^b.	05	4	2
Q.3		**Attempt any two.**			
	a)	Describe Sequences with an example.	05	3	2
	b)	Describe Procedures with a Program example.	05	3	3
	c)	Discuss While loop statement with an example.	05	3	3
Q.4		**Attempt any two.**			
	a)	Explain Exception handling with Pragma Exception_Init. Write a PL/SQL exception to delete department from dept table, where there is rows in the employee table of that department. dept(deptid, dname, dhod), employee(empid, ename, city, age, contactno, salary, comm, deptid).	05	4	3
	b)	Explain Parameterized Cursor with a suitable example.	05	3	3
	c)	Explain any five system defined exceptions.	05	2	3

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Q.5	**Attempt any two.**				
	a)	Explain Dynamic SQL with a suitable example.	05	4	4
	b)	Elaborate ACID Properties of transaction management	05	2	4
	c)	Explain Concurrency Control and Lock Management.	05	3	4

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