A.Y.-2023-24 – T Y B Tech – Department of Computer Engineering

ODD SEMSTER (SEM- V)

Subject: Advanced Database Management System Subject Code: PCCO50402T

Term Test – I

Unit- 2-8 Hrs

15 Marks

Q. No.	Questions (Statement)	CO Mapped	Blooms' Level	Max. Marks	PI
Unit-II Query Processing and Optimization					
Q1	Consider the database given below $\operatorname{Emp}(\operatorname{\underline{eid}},\operatorname{ename},\operatorname{salary},\operatorname{address},\operatorname{did})$ $\operatorname{Dept}(\operatorname{\underline{did}},\operatorname{dname},\operatorname{loc})$ For following Query generate Multiple Transformations by considering different equivalence rules. Also mention the used equivalence rule for transformation. Π name, $\operatorname{address}(\sigma\operatorname{dname}=\operatorname{"Music"}(\operatorname{Emp}\times\operatorname{Dept}))$	CO2	L4	10	2.2.3
Q2	Describe different equivalence rules used for transformation	CO2	L2	10	1.4.1
Q3	Write algorithm to compute Nested-loop join and Block nested-loop join. Also find the cost of transfer and seek associated with it.	CO2	L3	10	2.3.1
Q4	Describe how to measure query cost for selection operation with index and without index.	CO2	L3	10	2.3.1
Q5	State the methods used for evaluating an entire expression. Explain materialized evaluation with example.	CO2	L2	05	1.4.1
Q6	State the methods used for evaluating an entire expression. Explain pipelined evaluation with example.	CO2	L2	05	1.4.1
Q7	Write algorithm to compute external sort-merge and write the cost analysis of the same.	CO2	L3	05	2.3.2
Q8	Discuss query processing with neat diagram.	CO2	L2	05	1.4.1

Course Teachers Module Coordinators Program Coordinator HoD