Maturi Venkata Subba Rao Engineering College
Department of CSE
B.E IV-SEMESTER(2021-22) DBMS ASSIGNMENT – 2
LAST DATE OF SUBMISSION: 27-JUN-2022

1 Explain Fundamental Relational algebra operations.
2 Explain Extended Relational algebra operations.
3 What is the purpose o f creating views?
4   Write relational algebra expression for the following select statement
   a.   Select empno,ename,deptno,dname from EMP,DEPT where EMP.deptno=DEPT.deptno
   b.   Select empno,ename,sum(sal) from EMP group by deptno
5   What is difference between primary and secondary index?
6   Draw dense index using any example
7   Draw sparse index using any example
8   Construct the B+ tree index structure for the given set of search keys that can accommodate four (4) pointers in a node. 5 2 3 5 7 11 17 19 23 29 31 35
9   What is the advantage of Dynamic hashing over static hashing?
10 Write short notes on multi level indexing.
11 Differentiate B Tree and B+ Tree.
12 Define ACID properties.
13 Write short notes on bitmap indices.
14 Draw transaction state diagram and explain transaction states.
15 How do we test for view serializability explain considering suitable example.
16 How do we test for conflict serializability explain considering suitable example
17 What is cascading rollback?
18 What is blind write?
19 Define Trigger and write the syntax of it.
20 Explain Two phase locking protocol.
21 Explain Timestamp ordering protocol
22 Write short note on parallel databases, multimedia databases, multidimensional databases.
23 Write short notes on Data warehouse, OLTP, OLAP, NoSQL Databases.
24 Write short notes on NULL values.