

2008 MAHATMA GANDHI UNIVERSITY
B.TECH COMPUTER SCIENCE ENGINEERING
DATA BASE MANAGEMENT SYSTEM

MAY 2008

TIME 3 HOUR
MARK 100

PART A[10*2]

1. What is meant by data independence?
2. List the components of DBMS.
3. Differentiate between DDL and DML.
4. Write a note on views of SQL.
5. What is meant by catastrophic failure?
6. Discuss the storage organization in Oracle.
7. What is meant by multi valued dependency?
8. Explain Fifth normal form.
9. What is data replication? What are its advantages?
10. Discuss vertical fragmentation

PART B[10*8]

11. Explain the three-schema architecture of DBMS.
12. Design an ER schema diagram for a Library Management system.
13. Explain in detail with examples and syntax, various forms of queries in SQL.
14. Describe the structure of a relational database schema in general. With the help of an example illustrate all basic concepts like keys, constraints relationships etc. in the schema.
15. Discuss the cost components for a cost function that is used to estimate query execution cost.
16. Explain the database structure and its manipulations in Oracle.
17. What are the pitfalls in Relational database design? Discuss with examples.
18. Use the axioms for functional and multi valued dependencies to show that the following rules are sound:-
 - (i) The multi valued union rule.
 - (ii) The intersection rule.
 - (iii) The difference rule.
19. When it is useful to have replication or fragmentation of data? Explain.
20. Narrate the distributed database systems in Oracle.