Bachelor Level / eighth-semester / Science   Full marks: 60
Computer Science and Information Technology(CSC457)   Pass marks: 24
(Distributed and Object Oriented Database)   Time: 3 hours
Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.

Group A

Attempt any two questions. (2 x 10 = 20)

1. Discuss client/server architecture and peer-to-peer architecture of distributed DBMS.

2. What is reliability protocol? Discuss two phase commit protocol for distributed environment.

3. What is object-oriented database? Differentiate it with relational database . Discuss the characteristics of object oriented data model.

Group B

Attempt any Eight questions.(8 x 5 = 40)

4. Differentiate between distributed database with centralized database.

5. Discuss MDBS architecture.

6. What are the correctness rules of fragmentation? Discuss.

7. Discuss normalization step of query decomposition.

8. Discuss three situations that can occur if proper isolation is not maintained.

9. What is deadlock? Discuss deadlock prevention in distributed concurrency control.

10. Explain mean time between failures and mean time to repair.

11. What is object query language? Differentiate it with structured query language.

12. Discuss the performance issues of OODBMS.

13. Write short notes on:

a) Autonomy

b) CORBA