

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: MCA
BRANCH: MCA

SEMESTER : III
SESSION : MO/19

SUBJECT: CA530 DISTRIBUTED DATABASES

TIME: 3.00Hrs.

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Discuss the various promises of DDBMSs. [5]
Q.1(b) List the various design issues of DDBMS. Explain Distributed Concurrency Control issue, Distributed Deadlock Management and Reliability of Distributed DBMS issue. [5]
- Q.2(a) Give a brief account of architectural models for distributed DBMS. [5]
Q.2(b) Explain clustering algorithm using matrices. [5]
- Q.3(a) Explain with diagram the Generic Layering Scheme for Distributed Query Processing. [5]
Q.3(b) Explain distributed cost model with an example. [5]
- Q.4(a) Explain optimistic concurrency control algorithms and “relaxed” concurrency control. [5]
Q.4(b) What do you mean by transaction model? Give an example for a transaction. What are the termination conditions of a transaction? [5]
- Q.5(a) Draw a diagram and explain the full memory hierarchy managed by LRM and BM. [5]
Q.5(b) Explain the failures in DDBMS. [5]

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