

Roll No.

23075

M. Tech. 3rd Sem. (Computer Engg.)

Examination – December, 2013

ADVANCED DBMS

Paper : MTCE-703-A

Time : Three hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions.

1. (a) Describe with the help of an SQL query requiring join operation, selection and projection ? Explain.
In what ways to improvement of query quality ? 10
- (b) What is the Query evaluation ? How to evaluate of calculus expression ? 10
2. (a) What do you mean by reliability ? Why reliability necessary in recovery ? Explain with examples. 10
- (b) Why use logs and shadow paging scheme in the database ? Explain its benefits. 10

23075- 1,180 -(P-3)(Q-8) (13)

P. T. O.

3. (a) What is concurrency control ? How many types of locking scheme ? Explain which one Locking scheme best in concurrency control ? Why give its reason ? 10
- (b) Describe the deadlock ? How it come to existence and which procedure to remove in concurrency control ? 10
4. (a) Explain DDBMS ? What is the broad usage of homogenous and heterogeneous technique used in DDBMS ? 10
- (b) Compare and contrast various data models explain with examples. 10
5. (a) What is the object relational databases ? How they differ from object oriented databases ? Explain its features. 10
- (b) Explain lossless join decomposition algorithm ? Give an example. 10
6. (a) What is data warehouse ? Explain its architecture ? How they input data in warehouse ? 10
- (b) What is metadata ? Explain OLAP engine ? 10
7. (a) Write the similarities and dissimilarities between BCNF and 4th normal form ? 10
- (b) Explain semantics of tuple relation calculus queries and domain relational calculus ? 10

23075- 1,180 -(P-3)(Q-8) (13) (2)

8. Write a short note on :

20

- (a) view processing
 - (b) disaster recovery
 - (c) timestamp - based order
 - (d) serializability
-

23075-1,180-(P-3)(Q-8)(13) (3)