Printed Pages : 1 **Roll No.** | | | | | | | | | | | **NCS069**

B.TECH.

THEORY EXAMINATION (SEM–VI) 2016-17

ADVANCE DBMS

Time : 3 Hours ***Max. Marks : 100***

Note : *Be precise in your answer. In case of numerical problem assume data wherever not provided.*

SECTION-A

1 Explain the following : **(10×2=20)**

a) Transaction transparency
b) Concurrency control
c) System log
d) Orphan and inconsistent message
e) Check point
f) Semi joins and bloom joins
g) Data Replication
h) Serializable schedules
i) Thomas write rule
j) Active databases

SECTION-B

2 Attempt any five of the following : **(10×5=50)**

a) Discuss MOSS concurrency protocol with its architecture.
b) Explain why row level locking is generally seen more desirable than table level locking?
c) Compare the deferred- modification and immediate-modification version of the log-based recovery schemes, in terms of ease of implementation and overhead cost.
d) What do you understand by Database Replication Techniques? What are the parameters of Eager Replication?
e) What is deadlock? How distributed deadlocks are handled in DDBMS?
f) What is the purpose of fragmentation in distributed database? Describe the various types of fragmentation methods.
g) What do you mean by a lock scheduler? Explain the process of obtaining the lock. Explain the lock table.
h) How is transaction management in distributed database different from transaction management in a standalone database? Describe distributed transaction management.

SECTION-C

Attempt any two of the following : **(15×2=30)**

3 Discuss Multiple Granularity in detail using an example. Discuss the significance of Multi Granularity in database.

4 What are protocols? Explain lock based and time stamp based concurrency protocol with suitable example.

5 Differentiate between RDBMS and OODBMS. How does the concept of an object in the object oriented model differ from the concept of the entity in the entity-relationship model?

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