



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)

- Transaction transparency
- Concurrency control
- System log
- Orphan and inconsistent message
- Check point
- Semi joins and bloom joins
- Data Replication
- Serializable schedules
- Thomas write rule
- Active databases

SECTION-B

2 Attempt any five of the following :

(10×5=50)

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

- Discuss Multiple Granularity in detail using an example. Discuss the significance of Multi Granularity in database.
- What are protocols? Explain lock based and time stamp based concurrency protocol with suitable example.
- 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?

