

Code: CS7T4B

**IV B.Tech - I Semester – Regular/Supplementary Examinations
October - 2018**

**ADVANCED DATABASES
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1.

- a) What is a file scan?
- b) What is Semantic Query Optimization?
- c) Define a Transaction and list its properties.
- d) Explain Commit and Rollback.
- e) What is a Phantom read?
- f) What is starvation?
- g) What is shadow paging?
- h) What is a checkpoint?
- i) Define a trigger.
- j) List the formats of GIS data Representation.
- k) What does a Genomic Database represent?

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Explain various search methods used for simple and complex Select operations. 8 M
- b) State the cost components of Query Execution in query optimization. 8 M
3. a) Explain Why concurrency control is needed? 8 M
- b) Illustrate how schedules are characterized based on recoverability. 8 M
4. a) Explain Basic Timestamp ordering protocol. 8 M
- b) Explain multiple Granularity Locking Protocol in detail. 8 M
5. a) Explain ARIES Recovery Algorithm. 8 M
- b) How is recovery in Multi databases done? 8 M
6. a) Write a few words about GIS. 8 M
- b) State the design and implementation issues for active databases. 8 M