

## SIXTH SEMESTER B.TECH. (ENGINEERING) DEC EXAMINATION, JUNE 2012

CS/IT 04 602 - DATABASE MANAGEMENT SYSTEMS

Time: Three Hours

Maximum: 100 Marks

## Part A

Answer all the questions.

- Explain Database languages and interfaces.
- 2. What are Data models in dbMs? Explain.
- 3. Draw a neat sketch on magnetic disks.
- 4. Explain the various organization of records in files.
- 5. Explain Boyce-Codd normal form.
- 6. Explain lossless join decomposition concept.
- 7. Write about atomicity and durability.
- 8. Explain multiple granularity.

 $(8 \times 5 = 40 \text{ marks})$ 

## Part B

9. Explain in detail, what are the disadvantages of file system and what are the various advantages of file system.

Or

- (i) Construct an ER diagram to relate employee, department with necessary conditions.
- (ii) What are the difference in weak entity and strong entity set? Explain.

(8 + 7 = 15 marks)

10. Explain in detail various Raid Levels.

Or

Explain briefly Bt tree concept.

11. What is the use of normalization? Explain various normalization technique with neat examples.

Or

Explain relation algebra operations with necessary queries.

12. Explain in detail various control techniques.

Or

What is Deadlock? How to prevent and handle deadlock? Explain deadlock handling in detail,

 $(4 \times 15 = 60 \text{ marks})$