

Reg. No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code : 45272

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Third Semester

Software Engineering

ESE 033 – DATABASE MANAGEMENT SYSTEMS

(Regulation 2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is data model?
2. What are the drawbacks of file systems?
3. List some secondary storage devices.
4. What is indexing?
5. List four relational algebra operations.
6. What are constraints? Give examples.
7. List the properties of transactions.
8. What is serializability?
9. What are locking techniques available?
10. What is shadow paging?

PART B — (5 × 16 = 80 marks)

11. (a) Explain in detail about DBMS architecture with a neat diagram.

Or

- (b) Write in detail about ER model. Draw a ER diagram for a student result management system.

12. (a) Write short notes on the following:
- (i) Hashing techniques (8)
 - (ii) Indexing. (8)

Or

- (b) Write short notes on the following.
- (i) Single level indexing (8)
 - (ii) Multi level indexing. (8)

13. (a) Write short notes of SQL and list out the various DDL, DML commands with appropriate examples.

Or

- (b) Explain all the normal forms with suitable examples.

14. (a) Explain in detail about the algorithms for executing query operations.

Or

- (b) Write in detail about transaction support in SQL.

15. (a) List out the various locking technique and explain them in detail.

Or

- (b) Write short notes on :
- (i) Log based recovery (8)
 - (ii) Access control. (8)