**R13** 

Max. Marks: 75

[10]

[10]

[10]

## Code No: 114CQ

**Time: 3 Hours** 

9.

10.

11.

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech II Year II Semester Examinations, May - 2016 DATABASE MANAGEMENT SYSTEMS

(Common to CSE, IT)

**Note:** This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions. PART - A **(25 Marks)** 1.a) Discuss about DDL. [2] b) Write brief notes on altering tables and views. [3] Describe about outer join. [2] c) What is meant by nested queries? d) [3] What is second normal form? e) [2] Describe the inclusion dependencies. [3] f) What is meant by buffer management? g) [2] What is meant by remote backup system? h) [3] Discuss about primary indexes. [2] i) What is meant by linear hashing? i) [3] PART - B (**50 Marks**) 2. Explain the relational database architecture. [10] 3. State and explain various features of E-R Models. [10] Explain Tuple relational calculus. 4. [10] OR 5. Discuss about domain relational calculus. [10] 6. What is meant by functional dependencies? Discuss about second normal form. [10] 7. Explain fourth normal form and BCNF. [10] 8. What is meant by concurrency control? [10]

What is meant by extendable hashing? How it is different from linear hashing?

Discuss about failure with loss of nonvolatile storage.

What are the indexed data structures? Explain any one of them.