

Code No: **R32192****R10****Set No. 1****III B.Tech II Semester Supplementary Examinations, April - 2018****DATABASE MANAGEMENT SYSTEMS**

(Electronics and Computer Engineering)

Time: 3 hours**Max. Marks: 75****Answer any FIVE Questions****All Questions carry equal marks**

- 1 a) Draw and explain the detailed system architecture of DBMS. [8M]
b) Explain in detail about advantages Database Management System over file system. [7M]
- 2 a) Briefly Explain database system structure with neat sketch. [8M]
b) List the steps in proper sequence in order to convert an ER and EER diagram into tables. [7M]
- 3 a) What is a view? Explain the syntax. Explain the different types of views. [8M]
b) Explain all types of Joins with commands and examples. [7M]
- 4 a) Explain any three Aggregate functions and Scalar functions with examples. [8M]
b) Write SQL statements (Query) for following tables: [7M]
T1(rollno, stuname, age, city, branchcode)
T2(branchcode, branchname)
1. Retrieve students details whose branchcode is 5.
2. Find an average age of all students.
3. Add new branch in T2 table.
4. Display rollno, stuname and age of students whose city is Chennai.
5. Change age of student to 20 whose rollno is 1.
6. Delete student details whose age is 18.
7. Retrieve branch information in descending order.
- 5 a) State 1NF, 2NF & 3NF and explain with examples. [8M]
b) Explain the concept of functional dependency with an example. [7M]
- 6 a) What is locking? Explain Two phase locking and its types. [8M]
b) Explain ACID properties of transaction. [7M]
- 7 a) Explain the Immediate Database modification Log Based Recovery method with an appropriate example. Explain role of check point in Log base. [8M]
b) Explain COMMIT and ROLLBACK commands. State the differences between them. [7M]
- 8 Explain Index sequential access method (ISAM) in detail. [15M]
