

Assignment and Internal Evaluation criteria

(Total 30 Questions)

- Any 7 ER diagram from old questions
- Any 7 SQL questions from old questions
- Any 7 Relational algebra questions from old questions
(Question must be other than that is discussed in class)

22. Differentiate between relational algebra and relational calculus? Define TRC and DRC?

23. Why ACL technique is considered safe-way for database security? How is any user is allowed or prevented from accessing certain database?

24. What is the role of assertions and triggers in SQL? Compare them.

25. Compare shadow page recovery scheme with log based recovery scheme.

26. Is it necessary to manage at OS level if security in database level is already done? Explain different security issues in DBMS?

27. Explain serial schedule and serializable schedules with examples.

28. Consider the following relational schema

Sailors (sid,sname,rating,age)

Boats(bid,bname,color)

Reserves(sid,bid,day)

Write a relational algebra expression for the query "find the name of sailors who have reserved red or green boat". Construct the initial operator tree and final efficient operator tree after applying transformation rules.

29. Create a un-normalized table and normalized it upto 5NF.

30. solve question of 2013 spring 3(a)

Internal evaluation criteria

Theory	Lab
Unit test (5 marks) Assessment(10 marks) Assignment(7 marks) Presentation(3 marks) Attendance (5 marks) <i>Note: student must passed in assessment exam</i>	Lab report (4 marks) Attendance(4 marks) Demo(4 marks) MCQ(4 marks) Viva(4 marks)