PRESIDENCY UNIVERSITY, BENGALURU
SCHOOL OF ENGINEERING

Max Marks: 30   Max Time: 55 Mins   Weightage: 15 %   **Set A**

TEST 3

II Semester 2016-2017   Course: **COE A 206 Database Systems**   19nd April 2017

Instructions:
   i.   Write legibly
   ii. Assume Data Wherever necessary.

Part A

(2Q x 6M= 12 Marks)

1. What is normalization? Explain 1NF, 2NF, 3NF with suitable examples?
2. Explain RAID in detail?

Part B
(3 Q x 4 M= 12 Marks)

3. Describe clearly   ACID properties of a transaction with a suitable example?

4. Consider the relation R(A,B,C,D,E) that has the following functional dependencies:

AB→C

CD→E

DE→B

Decompose this relation, if necessary.

5. What do you understand by concurrent execution of transaction .Explain with suitable examples?

Part C
(1Q x6M=6Marks)

6. State the difference between Procedures and functions? (List down at least 4 points)

WAP using a procedure to find square root of number?

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TEST 2

II Semester 2016-2017   Course: **COE A 206 Database Systems**   22nd March 2017

Instructions:
  i.   Write legibly
  ii. Assume Data Wherever necessary.

Part A

(3Q x 4 M= 12 Marks)

1. Explain how a view created and updated? Illustrate with examples?
2. List and Explain different types of Set operators? Explain with suitable examples Intersection and Minus operations?
3. Explain Different types of Aggregate Function with suitable examples (any 2)?
    Also Explain group by and having clause with example?

Part B

(3 Q x 4 M= 12 Marks)

4. Define what do you mean Single row Function? Explain with suitable examples CASE operator with examples?

5 .List and Explain different types of Subqueries? Explain with suitable examples of Single Row and Multiple Row Subqueries?

6 Briefly explain what do mean by PLSQL(Write down Syntax of PLSQL)?Write a program in PLSQL to find Simple Interest ?

Part C

(1Q x6M=6Marks)

7. Explain in detail how is Relational Algebra Different from Tuples Relational Calculus? Illustrate with suitable examples?

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TEST 1

H Semester 2016-2017   Course: **COE A 206 Database System**   22nd February 2017

Instructions:

i.   Assume Data Wherever necessary.

Part A

(5Q x 2 M= 10 Marks)

1. What are disadvantages in File processing System?

2. Describe the three levels of abstraction offered by a DBMS?

3. Table of Information: **EMPLOYEE**:

Employee_ID	Lastname	Salary	Job_id	Department_id
100	King	50000	AD_PRES	90
101	Kochar	45000	AD_VP	80
102	DeHaan	40000	IT_Prog	70
103	Hunold	35000	ST_Man	60
104	Ernst	30000	PROG	50

3a. Create a SQL query to display the Lastname and salary of employee earning salary more than Rs.35000.

3b. Create a SQL query to display the lastname of all employee where the second letter of the name is an o.

4. With respect to SQL, explain with example: Alter command.

5. Describe briefly different types of Mapping cardinalities?

Part B

(3 Q x 4 M= 12 Marks)

Q6. What are different data user ?Explain the role of database administrator?

Q7. Explain Primary key and foreign key and illustrate with suitable example?

Q8. State Briefly what is Inner join(Equijoin) and Non Equijoin? Explain with suitable examples.?

Part C

(1Q x8M=8Marks)

Q9. Draw an ER Diagram for a Banking Enterprise(State the assumption clearly).Convert this ER diagram into tables   ?

Entities: Branch(BNO,Bname,Baddress)   Staff(Sno,SnameDesignation,Address,Salary)

Customer(CNO,Cname,Caddress,Details)   Account(Ano,Type,BalanceDate_of_open)

Transaction(Tid,Type,Amount,Date,A/cno)