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(Printed Pages 4)

(20115)

Roll No. ....

BCA - V Sem.

18021

BCA Examination, Dec. 2014

Introduction to DBMS

(BCA-501)

(New)

Time : Three Hours ]

[Maximum Marks : 75

Note: Attempt all the Sections as per instructions.

### Section-A

Note: Attempt all the five questions. Each question carries 03 marks.  $3 \times 5 = 15$

1. What do you mean by Database? What are the characteristics of Database approach.
2. State the difference between Generalization & Specialization.

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3. Differentiate between Sequential and Random access in files.
4. What do you mean by relational algebra? What are the various relational Algebra operators?
5. Define 3<sup>rd</sup> NF and BCNF with example.

### Section-B

Note: Attempt any two questions out of the following 03 questions. Each question carries 7.5 marks.  $7.5 \times 2 = 15$

6. What do you mean by Integrity? Explain various Integrity constraints with example.
7. What are the various database design guidelines? Explain 4<sup>th</sup> NF and 5 NF.
8. Create ER diagram for the following relations:

Emp

Empno	E name	Sal	Joiningdate	deptno
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Dept

Deptno	Dname	Loc
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Project

Projno	Deptno	Projname	No. of projects
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### Section-C

**Note:** Attempt any **three** questions out of the following **5** questions. Each question carries **15** marks.  $3 \times 15 = 45$

9. Explain DBMS architecture in detail.
10. What do you mean by data Independence? What is the difference between logical data Independence and physical data Independence? <https://www.ccsustudy.com>
11. Define Entity, Entity sets, strong entity, weak entity and Draw ER diagram for School management system by taking your own assumptions.

12. What do you mean by Normalization? Why do we normalize the database?
13. Differentiate between Association and Aggragation with suitable examples.