

END TERM EXAMINATION

SECOND SEMESTER [BCA] MAY-JUNE 2016

Paper Code: BCA-110

Subject: Database Management System

Time : 3 Hours

Maximum Marks :75

Note: Attempt any five question including Q.no.1 which is compulsory. Select one question from each Unit.

- Q1 Attempt **any five** parts of the following: **(5x5=25)**
- (a) Differentiate between Primary Key, Candidate Key
 - (b) Define Relational Algebra
 - (c) What are anomalies
 - (d) Explain stored VS Multivalued attributes
 - (e) Explain EER and ER Diagram
 - (f) Discuss about Normalization

UNIT-I

- Q2 (a) Explain the three schema architecture with diagram. Compare traditional approach and DBMS Approach. **(8)**
- (b) Explain Domain, Entity Integrity and referential integrity constraints. **(4.5)**
- Q3 (a) Design an E-R schema for a database to store information about professors, courses and course sections in the university Database system. (You can write your assumptions) **(8)**
- (b) What do you mean by Data independence. Differentiate between physical and Logical Data independence. **(4.5)**

UNIT-II

- Q4 (a) What is a join, why is it required? What are the categories of join. Explain selfjoin, outer join, natural join etc. **(8)**
- (b) Explain group by clause and having with an example. **(4.5)**
- Q5 (a) Write Sql queries for the following tables. **(8)**

Employee

<u>Empno</u>	Ename	Job	MGR	Hiredate	Sal	Comm.	Deptno.
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Department

<u>Dname</u>	Dnumber	Dloc
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- (a) List all the employee names along with their salary.
- (b) List the Different jobs.
- (c) List the employee names having 'I' as the second character.
- (d) List the employees who are from department 30 and their salary is more than 40,000.

- (b) What is view. Explain with the help of an example. **(4.5)**

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[P.T.O.]