

Bachelor of Computer Application (BCA) Examination  
IV Semester

**Data Base Management System**

Time : 3 Hours ]

[ Max. Marks : 50

**Note : Attempt all questions, choosing any two parts of each question.  
Each question carries equal marks.**

1. (a) List five significant difference between a flat file processing system and a DBMS  
(b) What is database system ? Explain each component of data-base system.  
(c) What are the different levels of abstraction ? Explain each of them.
2. (a) What is key ? Discuss various types of key.  
(b) What is an E-R diagram ? Explain it by suitable example and there symbols.  
(c) Explain the need of aggregation with example.
3. (a) Explain DDL and DML statement with two example of each.  
(b) Explain EXISTS and NOT EXISTS with example.  
(c) Consider the following table with primary key underlined :  
Employee (Ename, Eno, Salary, Dno)  
Department (Dno, Dname)  
Project (Pno, Pname, Dno, Plocation)  
Works on (Eno, Pno, Hours)  
Formulate the query in SQL to perform the following :  
(a) Count the number of distinct salary values in the database.  
(b) Find the sum of the salaries of all employee.
4. (a) What do you mean by Decomposition? List out the properties of decomposition?  
(b) What is 3NF? How it is achieved and what are its advantages over 2NF?  
(c) Write short note on Stored Procedure.
5. (a) Discuss the difference between DBMS and RDBMS.  
(b) Explain the characteristics of RDBMS.  
(c) What are Oracle tools ? Explain some of the tools.

\* \* \*