Total No. of sheet used : 01   **Total No. of Questions: 09**
Subject : Fundamentals of Database Management System
Class : BCA 3rd Semester
Paper : BCA-216
Title of Paper : Fundamentals of Database Management System
Time Allowed : 3 Hours
Maximum Marks: 75

Note: Candidates are required to attempt five questions in all selecting at least two questions each from sections A and B. Section C is compulsory.

SECTION A

Q1. Define database management system. What is the need of using a DBMS?   15
Justify your answer giving suitable examples.

Q2. Define data independence. What are the various types of data independence?   15
How mapping is performed between different levels of database architecture?
Explain.

Q3. Elaborate aggregation, Generalization and Specialization with suitable   15
examples.

Q4. What are various integrity constraints? Discuss in detail.   15

SECTION B

Q5. What are the problems of bad database design? How these problems can be   15
resolved? Discuss in detail.

Q6. Define various types of functional dependencies. Discuss multi-valued   15
dependency in detail.

Q7. What is a table? What are various methods to create a table in MS-ACCESS?   15
Discuss in detail.

Q8. What do you mean by query? What are various ways to create and execute   15
queries in MS-ACCESS? Discuss in detail.

SECTION C

Q9.   a)   Briefly discuss the role of DBA?   03
     b)   What do you mean attribute, entity and entity set?   03
     c)   What is candidate key and foreign key?   03
     d)   What are various form controls?   03
     e)   What are the advantages of creating reports using wizard?   03