**Question Bank IA 1**

1. Define DBMS and state its 5 application in real life.
2. State and explain ACID property of DBMS.
3. Explain Types of DBMS users & role of DBA in detail.
4. Give the advantage of DBMS over file system.
5. Describe the overall architecture of DBMS with the diagram.
6. What is a view? How it is created and stored.
7. Explain various data types used in SQL.
8. Write and explain GRANK & REVOKE commands.
9. How to create a role and assign password and privileges.
10. List & explain SET operators.
11. Explain Group by and having clause.
12. What do you mean by super key and candidate key.
13. Explain different types of constraints in SQL.
14. Explain primary key constraint with syntax.
15. Explain foreign key constraint with syntax.
16. Consider the following relation and answer the given queries.

Author (Author-Name, country)

*Books* (ISBN, title, Pub-year, unit-price, Author-name, Publisher - name)

* 1. Get the author country details for the book DBMS’
  2. GET the details of book title starting with ‘D’.
  3. Get the author details whose name has ‘A’ in the second place.
  4. Define primary key AUTHOR NAME in author table and foreign key on Author-name of books table.
  5. Get the sum of book price published in each year.
  6. Get the average price of book published in each year
  7. Get the count of books published in each year where count should be more than 10
  8. Get the maximum price of books published each year and arrange the output in increasing order of price
  9. Get the minimum price of books published each year and sort the output in decreasing order of year.
  10. insert a new row in for C programming by Yashwant Kanetkar costing 250

in 2012 published by McGrawhills.

* 1. Delete book title 'Operating system'
  2. Add a column of gender for author

1. Define: Entity set, Attribute, Relation.
2. Explain Weak & strong entity set with example.
3. Explain Type of attribute with example
4. What is meant by mapping cardinality? Explain with example
5. White short note on: Specialization, Generalization, Aggregation
6. Explain Like operator, between operator, IN operator and wild card characters in SQL.
7. Draw the notation used in ER model with their purpose.
8. Draw the ER model for bank, hospital systems stepwise.
9. Consider the following relations:

Employee (E-name, street, city)

WORK'S (E-name, company name, salary)

COMPANY (Company name, city)

1. Find the names of all employees who works for city Bank
2. Find the employee name and company names of all employee sorted in ascending order of company name & descending order of employee names of that company
3. Find employee who live in the same city as their company city.
4. Change the city of city bank to Delhi.
5. EXPLAIN DIFFERENT TYPES OF JOIN.