

DBMS Question Bank

1. Discuss the difference between data and information. Provide examples from the real world for each term.
2. What are the two data-gathering methods? Give examples for each method.
3. Using examples from the real world discuss how we interact with data in our day-to-day life.
4. Considering the below characteristics, discuss the differences between data and information.
 - a) Nature
 - b) Meaningfulness
 - c) Interdependency
5. Information is organized or classified data with meaningful values for the receiver. For the decision to be meaningful, the processed data must qualify for different characteristics. Discuss the characteristics that define meaningful data.
6. Data processing is the re-structuring or re-ordering of data by people or machines to increase their usefulness and add value for a particular purpose. Discuss the steps in the data processing cycle.
7. What is a database? With examples of database applications
8. What are the features of a database.
9. What is DBMS? And what are the advantages of Database approach?
10. What is Data hierarchy
11. Short note on Data modelling vs Data model
12. What is the importance of data models
13. What are the basic building blocks of data model
14. What are the data model types
15. Tutorial 03
16. What is the role of a DBMS, and what are its advantages? What are its disadvantages?
17. List and describe the different types of databases.
18. What is metadata?
19. Explain why database design is important.
20. What are the potential costs of implementing a database system?
21. Tutorial 05
22. What is a data model? Why do we use both ER Model and the relational model in designing a database? Explain.
23. Discuss the properties of a relation and comment on why these properties are important.
24. Explain five versatile features of a DBMS.
25. What do you understand by top-down and bottom-up approaches for DB design. Explain giving examples.
26. Demonstrate, giving sample SQL statements, how relational integrity can be implemented in SQL92.

What is a data model? Explain the difference between Conceptual, logical, and physical data modeling giving examples.

27. Discuss the importance of the relational model.
28. What are the different aspects of relational integrity?
29. Demonstrate, giving sample SQL statements, how each of the above forms of relational integrity in part (29) can be implemented using SQL.
30. Assume that you are requested to give advice on buying a DBMS for a small manufacturing organization where only five executive members are handling the DB operations. Indicate which of the following DBMS features company should pay for, in each case also indicate why the organization should (or should not) pay for that features in the system they buy,
Security facility
Concurrency control
Crash control
31. . What are the levels in 3-Tier architecture of the DB?
32. Advantages of the Three Tiered Architecture?
33. What are various DDL commands in SQL? Give brief description of their purposes.
34. What are various DML commands in SQL? Give brief description of their purposes.
35. What are various DCL commands in SQL? Give brief description of their purposes.
36. State the different stages of Database designing process.
37. What are the main types of data models?. List down examples.
38. What are the main elements of a ER model
39. State different types of entities and how they can be differentiated.
40. What are the different types of attributes and explain with examples.
41. What are the main keys identified in a DB environment. Explain how to determine a primary key among above mentioned keys.
42. Define followings using suitable examples
 - a. Participation constrains
 - b. Integrity constraints
43. List down clearly the requirements to be satisfied for each of the first 3 normal forms
44. Explain the approach, and steps you take in designing a database.
45. Compare the differences in database and file based approaches.
46. what is meant by "SQL is a 4GL" ?
47. Define a Functional Dependency and explain their use in DB design.
48. Discuss the advantages of using the database approach as compared to the traditional file processing approach.