Short Answer Questions

1. What is data?
2. What is Information?
3. What is the difference between data and information?
4. What is Metadata?
5. Explain various types of Metadata?
6. What is data dictionary?
7. What is active data dictionary?
8. What is passive data dictionary?
9. What is the difference between active and passive data dictionary?
10. What is data base?
11. What are the main characteristics of a database?
12. What are the capabilities of a database?
13. Define database management system?
14. What are the various functions of DBMS?
15. What are the criteria of classifying DBMS?
16. What is a field?
17. What is record?
18. What is a file?
19. Differentiate between field, record and file?
20. Give names of components of database?
21. What are the main components of DBMS?
22. What is traditional file system?
23. How traditional file system is different from database system?
24. What are the disadvantages of traditional file system?
25. What is database system?
26. What are the components of database system?
27. What are the advantages of database system?
28. What are the disadvantages of database system?
29. What are various users of DBMS?
30. List the people associated with the database.
31. What is DBA?
32. What are the responsibilities of DBA?

33. List 5 DBA Activities in the order that they are most performed.
    Ans. Backup/Restore, Startup/Shutdown, Capacity Planning (Disk Space), Performance, Connectivity, Transactional Problems (Concurrency, etc.)
34. What are the various languages of DBMS?
35. What is DDL?
36. What is SDL?
37. What is VDL?
38. What is DML?
39. What is 4GL?
40. What is the difference between DDL and DML?
41. What is an instance?
42. What is schema?
43. What is subschema?
44. What is the difference between schema and subschema?
45. What is the difference between schema and instance?
46. What is physical schema?
47. What is logical schema?
48. What is conceptual schema?
49. What are the three levels of three-tier architecture?
50. What is conceptual/Internal mapping?
51. What is external/conceptual mapping?
52. What are the advantages of three level architecture?
53. What is data independence?
54. What is physical data independence?
55. What is logical data independence?
56. What is the difference between physical and logical data independence?
57. Give some applications of DBMS.
58. What are the advantages of using a DBMS?
59. What are the criteria of classifying DBMS?
60. Give the levels of data abstraction?
61. What is storage manager?
62. What is an entity relationship model?
63. Define data model?
64. What are the categories of data models?

Long Answer Questions

1. What do you mean by data? How is it different from information, explain by example?
2. What are the four major components of database system? Explain.
3. What are the advantages of database systems? Explain in detail.
4. What is DBMS? What are the advantages and disadvantages offered by such systems as compared to file processing system? Explain.

5. What is schema and subschema? Why should a subschema be independent of schema? Also explain what is logical schema and physical schema and their differences?
6. Explain the terms:

   Database and DBMS with examples. Explain the three schema architecture of a DBMS with the help of diagram. Why do we need mappings between the different schema levels? Also explain the main advantages of DBMS.
7. What are the main responsibilities of DBA? Explain.
8. Explain the term DBMS. Discuss the responsibilities of DBA. Also explain the three level architecture of DBMS.
9. Explain data independence and its types.
10. What is DBMS? What are the main facilities that every DBMS should provide? Explain.
11. Explain what is schema? What is subschema and why subschema be independent of schema? Also explain the various types of data independence and their advantages.
12. What is meant by Data Independence? State its importance in database technology.
13. Describe the architecture of a database system. Why a database is desired to be an integrated one?
14. Define data, database, DBMS, record, file and field by giving example of each.
15. Differentiate between the following:

   (*i*) Physical data independence and logical data independence.

   (*ii*) A normal file system and database management system.
16. Comment upon the following:

   (*i*) Various components of DBMS. (*ii*) DDL and DML.
17. Explain the client server architecture. Also write advantages and disadvantages of it.
18. Explain different types of DBMS languages with example of each.
19. Explain different types of DBMS user's with their jobs and responsibilities.
20. Explain data dictionary by giving suitable example.