40 IMPORTANT QUESTIONS OF DBMS:-

1. Explain types of attributes in ER diagram.
2. Explain the difference between a weak and a strong entity set with example.
3. Discuss three level of abstractions or schemas architecture of DBMS.
4. Define constraint and its types in DBMS.
5. Compare Generalization, Specialization and aggregation with suitable examples.
6. Draw overall structure of DBMS and explain its components in brief.
7. Construct an E-R diagram for a hospital with a set of patients and a set of medical doctors. Associated with each patient, a log of the various tests and examinations conducted.
8. Distinguish between DBMS and RDBMS
9. What is Relational Algebra?
10. Describe Integrity constraints with its types.
11. Discuss the following terms (i) DDL Command (ii) DML command.
12. Write difference between Cross Join, Natural Join, left outer join and right outer join with suitable example.
13. Define constraint and its types in DBMS.
14. What is relational calculus? Differentiate relational algebra and relational calculus.
15. List the data types that are allowed for SQL Attributes.
16. What do you mean by Cursors in SQL?
17. Define Union and Intersection using SQL.
18. Explain normalization. What is normal form?
19. Describe the Normal forms. What is the 3NF and BCNF?
20. Describe the following terms :
21. (i) Multivalued dependency
22. (ii) Trigger

23. Why do we normalize database?
24. Define partial functional dependency. Consider the following two sets of functional dependencies F= {A ->C, AC ->D, E ->AD, E ->H} and G = {A ->CD, E ->AH}. Check whether or not they are equivalent.
25. What is Trigger? Explain different trigger with example.
26. Write difference between BCNF Vs 3 NF.
    a. What do you mean by NoSQL?
27. What are the features of NoSQL?
28. What is the CAP theorem? How is it applicable to NoSQL systems?
29. Explain the difference: RDBMS vs NoSQL?
30. What are the major challenges with traditional RDBMS?
31. What are the different types of NoSQL databases?
32. How Does NoSQL relate to big data?
33. Can you explain the transaction support by using a BASE in NoSQL?
34. What is a Key-Value store or Key-Value database?
35. What is the Column store database?
36. Explain. About Serializability?
37. What is Concurrency Control? Discuss Multi-Version Scheme of Concurrency Control as well?
38. What is Shadow Paging and explain about Deadlock avoidance & recovery in database transactions?
39. What is Locking techniques in concurrency control and discuss about various locking techniques?