# Advanced database important questions

### Unit 1:

- 1. Explain the process to convert EER to relational model.
- 2.Describe the Extended E-R model in details.
- 3. Differentiate between specialization and generalization.
- 4. Discuss the different constraints of specialization and generalization.
- 5. What is file structure in DBMS? Explain different types of file organization.
- 6. What is Indexing? explain its types.
- 7. Discuss the Hashing concept in DBMS.
- 8. Differentiate the Hashing and Indexing.
- 9. Differentiate between static and dynamic hashing.
- 10. Explain the concept of bucket overflow in hashing.
- 11. Discuss any five advance sql in DBMS.

## Unit 2

- 1. Discuss the object-oriented database approach with its characteristics.
- 2. Write down the advantages and disadvantages of OODBMS.
- 3. Explain the different database extensions to SQL.
- 4. Discuss about ODMG object model.
- 5.Differentiate the objects and literals in ODMG.
- 6. Differentiate the persistent and transient objects.
- $7.\ \mathrm{Discuss}\ \mathrm{Object}\ \mathrm{database}\ \mathrm{conceptual}\ \mathrm{model}\ \mathrm{and}\ \mathrm{differentiate}$  with RDB.
- 8. Explain the mapping an EER to ODB schema rules.
- 9. Explain the Object Query language in detail.
- 10. Discuss the language binding in ODMG Standard.
- 11. Differentiate between OODBMS and RDBMS.

## Unit 3

- 1. What is Query Processing? explain its steps.
- 2. How can you measure the cost of query?
- 3. What is query optimization? Discuss its optimization strategies.
- 4. Differentiate heuristic and semantic based optimization.
- 5. Differentiate cost and semantic based optimization.
- 6. Differentiate cost and heuristic based optimization.
- 7. How can you express the query to optimized/tree transformation.
- 8. How can you choose the evaluation plans.

### Unit 4

- 1. Discuss the distributed database concepts with advantages and disadvantages.
- 2.Discuss the data fragmentation, Replication and allocation techniques for distributed database design.
- 3. Explain the types of distributed database systems.
- 4. Explain the architectures of distributed database.
- 5. Describe nosql.Differentiate Nosql with RDBMS.
- 6.Discuss different types of Nosql databases.
- 7. Discribe the CAP theorem.

- 8. Discuss Big data with its characteristics.
- 8. Write down the pros and cons of big data.
- 9.Discribe Map Reduce with its Phases.
- 10.List out the benefits of mapreduce.
- 11. Discribe hadoop with its advantages.

### Unit 5

- 1. Discribe the architecture of Active database.
- 2.Discuss different types of triggers.
- 3. Differentiate row level and statement triggers.
- 4. Discribe temproral database with its types.
- 5. Discuss Spatial database with its advantages.
- 6.Describe multimedia database concept with its applications.
- 7. Discuss the deductive database with its importance.
- 8. Differentiate Information retrieval and data retrieval
- 9. Differentiate between spatial and multimedia databases.
- 10. Differentiate structure and unstructured data.

## Wish you the best

-Purusottam Adhikari