II year B.Com. (computers)

Subject: RDBMS

UNIT WISE QUESTION BANK:

UNIT- I

(A) Short Answer Questions:

(1) Define @ Database ⓑ DBMS

(2) What is Database Systems?

(3) Write about Evolution of DBMS.

(4) Explain (or) write the drawbacks of File Systems?

(5) Explain (or) write the Advantages of DBMS?

(6) What is Data Redundancy & Inconsistency?

(7) What are the different Data Models in DBMS? Explain Relational model?

(8) What is Data Dictionary?

(9) What is Network model?

(10) Explain the various Components of Database Systems?

(11) What is Data sharing?

(B) Long Answer Questions:

(1) Write the Differences between DBMS and File Systems?

(2) Explain the functions of DBA?

(3) Explain the Various types of RELATIONAS MODELS?

(4) What is DBMS? Explain Various Components of DBMS?

(5) Explain the risks and costs of Database?

(6) Explain the different Stages of DDLC?

UNIT-II

(A) Short Answer Questions:

(1) Define the following terms and Give Examples?

   (a) Entity   (c) Object   (e) Strong Entity

   (b) Attribute   (d) Relation (f) Weak Entity

   (g) Simple Attribute (h) Comprsit-Attribute (i) Multi Valued Attribute

(2) What is Generalization?
(3) What is Specialization?
(4) What is Aggregation?
(5) Explain E-R Diagram with an example?
(6) Define functional Dependency?
(7) Define Transitive Dependency?
(8) Define Primary Key? Give Example?
(9) Define Foreign key? Given Example?

(B) Long Answer Questions:

(1) Define Cardinality? Explain the basic relationship of mapping with Example?

   (or)

   What is one-one, one-many, many-one, many-many Relationships Explain with Example?

(2) Explain Degree of a Relation with Example?

   (or)

   Explain unary, Binary, Tenary Relations?

(3) Explain Different Integrity Constraints?

(4) What is Normalization? Explain the Different Normal Forms? (or) Explain 1NF, 2NF, 3NF, BCNF with Examples?

(5) Explain Different types of Joins?

(6) Explain Various operators of Relational Algebra?

UNIT-III

Short Answer Questions:-

1. What is DataSchema?
2. What is Nested Query?
3. Write about Groupby Clause and Having clause?
4. What is difference between a view & a Table?
5. Explain client server Architecture?
6. Explain Update and Insert Commands?
7. Explain any five Aggregate functions of SQL with Example?

Essay Questions:-

1. Explain about Database Schema & Table with Examples?
2. Explain client Server Database Systems with Diagram?
3. Explain in detail Server data manipulation?

UNIT-IV

Short Answer Questions:-

1. What is Storage structure?
2. What is database Integrity?
3. What are the functions of DBA?
4. Differentiate between Authorization & Authentication?
5. Explain the Goals of DBA?
6. What is database security?
7. Explain about sequential File Organization?

LONG ANSWER QUESTIONS

1. Explain about DBA?
2. Define File organization? Explain types of file organization?
3. Explain about Codd's Rules of Database?
4. Explain about Database Security & Database Recovery?
5. Explain process of mapping Logical DataStructures to Physical Data Structures?

UNIT- V

(1) Define DDBms?

(2) write characteristics of DDBms?

(3) Write Advantages of DDBms?

(4) What is Data Fragmentation?

(5) What is Distributed Query processing?

(6) What is Database Security?

(7) Explain Two phase Commit protocol?

(8) Explain Distributed Two phase Locking?

Essay Question?→

(1) Write about DBms feature requirements.

(2) Write about DBms functions & capabilities?

(3) Explain advantages & Disadvantages of DDBms?

(4) Explain DBms Implementation Issues?

(5) Explain about Distributed Query processing?

(6) Write shat Notes on

   (i) Data Replication (ii) Data partitioning (iii) Data Fragmentation.

unit wise important questions b.com II Year RDBMS

Unit I

1. Discuss in detail about the database management system architecture with neat diagram?

2. Explain the different types of data model in detail with suitable examples

3. Describe the components of E- R diagram with example? [Ex: Library management system, Hospital management system any example they may ask]

4. Explain the different types of keys used in dbms discuss about database users and administrator

Unit II

1. Discuss the fundamental operations in relational algebra operations with suitable example.

2. Explain the following with suitable example
(i) Integrity Constraints
(ii) Distributed and Client server databases

3. What are aggregate functions? Discuss with examples, the various aggregate functions used in SQL?

4. With relevant examples discuss the following in SQL?
(i) DDL
(ii)DML
(iii)DCL
(iv) Views

Unit III

1. What is normalization? Explain 1NF, 2NF, 3NF and BCNF with suitable example.

2. Discuss on two-phase locking protocol and time-based protocol in detail?

3. Explain non-loss decomposition and functional dependencies with suitable examples

4. Discuss how schema refinement an improve schemas obtained through ER design

Unit IV

1. Explain different forms of serializability?

2. State and explain in detail about three concurrency problems

3. Why is recovery needed? Discuss any two recovery techniques?

4. Explain in detail about different locking protocols in detail.

Unit V

1. Discuss in detail about the different RAID Levels?

2. Illustrate the purpose of indexing .How indexing can be done by B+ tree. Explain.

3. Describe the different types of file organization? Explain using a sketch of each of them With their advantages and disadvantages

4. Explain the various complex selection predicates and sorting operations with an example