Approved by AICTE, New Delhi & Affiliated to Pondicherry University, Puducherry 134. Pondy - Villupuram Main Road, Ariyur, Puducherry - 605 102. ASPIRE TO EXCEL

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CS T53 / DATABASE MANAGEMENT SYSTEMS

DBMS 2 MARK QUESTION BANK

- 1. Disadvantage in File Processing System?
- 2. Describe the three levels of data abstraction?
- 3. Define the "integrity rules"
- 4. What is extension and intension?
- 5. What is Data Independence?
- 6. What is Data Model?
- 7. What is Object Oriented model?
- 8. What is Weak Entity set?
- 9. What is a Relation Schema and a Relation?
- 10. What is degree of a Relation?
- 11. What is Query evaluation engine?
- 12. What is DDL Interpreter?
- 13. What is Record-at-a-time?
- 14. What is Set-at-a-time or Set-oriented?

15. How does Tuple-oriented relational calculus differ from domain-oriented relational calculus?

- 16. What is Functional Dependency?
- 17. When is a functional dependency F said to be minimal?
- 18. What is Lossless join property?
- 19. What is BCNF (Boyce-Codd Normal Form)?
- 20. What is the difference between a procedural and non- procedural languages?
- 21. Define the following terms:
- DDL & DML ?
- 22. Define schema?
- 23. Define schema instance ?



TE, New Delhi & Affiliated to Pondicherry University - Villupuram Main Road, Ariyur, Puducherry - 605

ivenkates



- 24. What are the basi units of ER diagrams ?
- 25. Describe primary key ?
- 26. Describe foreign key ?
- 27. Describe candidate key ?
- 28. What is transaction?
- 29. What are the properties of transaction?
- 30. What are the operations of the transaction?
- 31. Draw the state diagram of the transaction?
- 32. What is serializability?
- 33. Basic steps in query processing
- 34. What is query execution plan and query execution engine
- 35. Explain selection using index structures.
- 36. Explain the implementation of complex queries.
- 37. What is External sorting.
- 38. What is hash table overflow?
- 39. How authorization provided to the users in SQL?
- 40. What are the ways in which pipeline can be executed.
- 41. Explain deadlock handling in detail
- 42. Explain about Microsoft SQL server in detail
- 43. Explain various models of locking a data item. Also explain two-phase locking protocol
- 44. Explain the various background process of Oracle in detail.
- 45. With a neat diagram discuss about architecture of MySQL in detail.
- 46. Discuss about Database Recovery procedure in detail
- 47. State and explain the Two-phase locking protocol with and example.
- 48. Explain about the Concurrency Control
- 49. Explain about the Recovery System for Database Management System.
- 50. Explain typically available storages media?



DBMS 11 MARK QUESTION BANK

UNIT – 1

1. Discuss about Data Models(7 marks)APRIL 2010, (Question Number:15)

2. Discuss about Keys(8 Marks) APRIL 2010(Question Number:6(iii))

3. Write about ER Diagrams(8 marks) APRIL 2010,NOV 2010,APRIL 2014(Question Number:15)

4. Write about UML(7 Marks) APRIL 2010, APRIL 2014(Question Number:14)

5. Explain the Structure of relational Databases in detail.(11 marks) NOV

2010(Question Number:6)

6. Explain the Aggregate functions in SQL with Examples.(11 marks) NOV

2010(Question Number:7)

7. Explain Three basic Notations in E.R Models with example.(11 Marks) APRIL 2011 (Question Number:15)

8. Explain the SQL and its basic structure of SQL QUERY. (11 Marks) APRIL 2011, APRIL 2012, NOV2014 (Question Number:8)

9. Explain Relational Algebra (11 Marks) APRIL 2011, APRIL 2012, NOV

2012(Question Number:7)

10. Discuss in detail about the Aggregate functions in SQL with Examples.(11 marks) NOV2012(Question Number:7)

11.Explain in detail Embedded SQL and Dynamic SQL (APRIL 2014)(11 Marks)

(Question Number:17)

12.Discuss about the views in relational model [APR 2014]

(Question Number:6,7)

13.Elaborate the concept of Advanced SQL [NOV 2014].

(Question Number:17,18)

14.Table: EMP Emp(empno, ename, job, mgr, hiredate, salary, comm., deptno)[APR 2015].

15.Discuss with examples various operations of Relation Algebra Operations. [APR 2015].



UNIT - II

1. Explain 4 NF and 5 NF with examples (11 marks)APRIL 2010, (Question Number:14).

2. Discuss Assertions, Triggers, Authentication (11 Marks) APRIL 2010, (Question Number:6 and

7).

3. Explain any one database system of your own with normalization (11 marks) NOV 2010, (Question Number:10).

4. Explain referential integrity in detail(11 marks) NOV 2010, (Question Number:10).

5. Explain database design process in detail. (11 marks)APRIL 2011, (Question Number:15).

6. Explain Authorization in SQL with example-Refer First unit notes11 marks (APRIL 2011, (Question Number:5)).

 7. Write about ER Diagrams(11 marks)" Refer First unit notes"11 marks APRIL 2012,NOV 2012,APR 2014(Question Number:15)

8. Explain any two normal forms in detail. 11 marks) APRIL 2012, (Question Number:10).

9. Explain Decomposition using Functional Dependencies.(11 marks) NOV 2012, (Question Number:10).

10. Explain 3 NF and 4 NF with examples (11 marks) APR 2014, (Question Number:13,14).

11. Explain the Fundamentals of database design and ER model. NOV 2014, (Question Number:9).

12. Explain in details about application design and development. Nov2014, (Question Number:15).

13. Discuss the various concepts of ER Model with an example. Apr 2015, (Question Number:16).

14. Explain about Database Design Process. Apr 2015, (Question Number: 17).

15. Explain organization of records in files structure in detail. Apr 2011

16. Explain B-Tree index files in detail. NOV 2010, (Question Number:20)



UNIT- III

- 1. Explain authorization in SQL. With example (April 2011) [Question No. 01]
- 2. Explain Database design process in detail (April 2011)[Question No. 02]
- 3. Describe Magnetic Disk and Flash storage in detail (April 2012) [Question No. 03]
- 4. Explain Join operation in detail (April 2012) [Question No. 04]
- 5. Write short notes on (April 2013)[Question No. 05]
- (a) Assertions.
- (b) Security and Authorization.
- 6. Describe about Normalization using functional dependency (April 2013)[Question No. 06]
- 7. Explain referential integrity in detail (Nov 2010) [Question No. 07]

8. Explain any one Database system of your own with normalization (Nov 2010) [Question No. 08]

9. Briefly explain RAID (Nov 2012)(April 2014) [Question No. 09]

10. Explain about B+Tree index files (Nov 2012)[Question No. 10]

11. Explain Query processing in detail. (April 2014) [Question No. 11]

12. Describe Indexing and Hashing.(Nov 2014) [Question No. 12]

13. Describe Query Optimization in detail. (Nov 2014) [Question No. 13]

14. Explain about Indexing concept with respect to database system. (Apr 2015) [Question No. 14]

UNIT – IV

- 1. Explain typically available storages media in detail (April 2011)[Question No.: 01]
- 2. Describe the following (April 2012) (April 2014)[Question No.: 02]
- A). Transaction Isolation & Transaction State

B). Serializability

- 3. Discuss about recovery and Atomicity (April 2012) [Question No.: 05]
- 4. Discuss fixed length records in detail with an example. (April 2013)[Question No.: 06]
- 5. Explain storage access in detail (Nov 2010) [Question No.: 07]



6. What is the transactions isolation level in SQL? How to implementation of isolation level. Discuss it. [Question No.: 08]

7. Explain about the Concurrency Control. (NOV 2014)[Question No.: 04]

8. Explain about the Recovery System for Database Management System. (NOV 2014) [Question No.: 05]

9. Explain about Transaction control in detail. (APRIL 2015) [Question No.: 09]

10. Briefly explain Query processing and Optimization in Oracle. (Nov 2013) (April 2014) (Nov 2014)

UNIT – V

1. Explain deadlock handling in detail (Nov 2012)(Question No. 8)

2. Explain about Microsoft SQL server in detail (April 2012) (Nov 2014) (Question No. 5)

3. Explain various models of locking a data item. Also explain two-phase locking protocol (Question No.

7)

4. Explain the various background process of Oracle in detail. (April 2015) (Question No. 9)

5. With a neat diagram discuss about architecture of MySQL in detail. (April 2015) (Question No. 10)

6. Discuss about Database Recovery procedure in detail. (April 2015) (Question No. 11)