

Dr. Babasaheb Ambedkar Open University
Term End Examination February – 2026

Course	: BCA/DCA	Date	: 13-Feb-26
Subject Code	: BCAN-202(NEW)/DCA-202	Time	: 03:00pm to 05:15pm
Subject Name	: Database Management System	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. What is DBMS? State its advantages and disadvantages.
2. What is normalization? What is need of normalization?
3. Compare RDBMS and OODBMS
4. What is data mining? Explain the steps in KDD process
5. Explain all the types of transactions.

Section B

Answer the following (Attempt any four) (20)

1. Compare Hierarchical, network and relational model
2. Explain the types of attributes.
3. What is referential integrity?
4. Explain basic DDL statements.
5. Explain ACID properties of transaction.
6. What is ETL process ?

Section C

Part – A (Multiple Choice Questions) (10)

1. _____ stores data about the data (meta-data).
A Model B Data Dictionary
C Template D None
2. Data Models in DBMS are classified into _____ categories
A 3 B 2
C 5 D 4
3. In which of the following, a separate schema is created consisting of that attribute and the primary key of the entity set
A A many-to-many relationship set B A multivalued attribute of an entity set
C A one-to-many relationship set D All of the above
_____ express the number of entities to which another entity can be associated via a relationship set.
4. A Mapping Cardinality B Messaging Cardinality
C Logical Cardinality D None of these

- 5 Database _____ which is the logical design of the database, and the database _____ which is a snapshot of the data in the database at a given instant in time
 A Instance, Schema B Relation, Schema
 C Relation, Domain D Schema, Instance
- 6 _____ module of a DBMS that restores the database to a correct condition
 A Transaction Manager B Recovery Manager
 C Save Point D None
- 7 _____ can help us detect poor E–R design
 A Database Design Process B E–R Design Process
 C Relational scheme D Functional dependencies
- 8 In the _____ scheme, a transaction that wants to update the database first creates a complete copy of the database
 A Shadow copy B Shadow Paging
 C Update log records D All of the above
- 9 If database modifications occur while the transaction is still active, the transaction is said to use the _____ technique.
 A Deferred–modification B Late–modification
 C Immediate–modification D Undo
- 10 The log is a sequence of _____ recording all the update activities in the database.
 A Log records B Records
 C Entries D Redo

Part – B (Do as Directed)

(10)

- 1 _____ is the process of hiding certain details of how data is stored and maintained.
- 2 IMS stands for_____.
- 3 Association among several entities is called as _____.
- 4 A function that has no partial functional dependencies is in_____ form.
- 5 _____ is the process of producing a description of the implementation of the database on secondary storage.
- 6 A _____ is a sequence of database operations that represents a logical unit of work and that accesses a database and transforms it from one state to another
- 7 Each row of data is a _____
- 8 OLAP stands for _____.
- 9 A _____ is a point in a transaction when you can roll the transaction back to a certain point without rolling back the entire transaction
- 10 In a deferred update approach, changes to the database are only written to disk after the transaction has been committed. (True/False)
