

**BHARATI VIDYAPEETH**  
(DEEMED TO BE UNIVERSITY), PUNE - 30

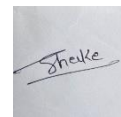
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**ANSWER SCRIPT COVER SHEET**

Online Remote Proctored Descriptive and MCQ mode of University Examinations for Winter 2025

PRN:	2545100716
SEAT NUMBER:	2525691016
PROGRAMME NAME:	BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2023)
SUBJECT NAME:	DBMS-I
SEMESTER:	Sem-2
EXAM DATE:	11/01/2026
EXAM TIME:	11:00 AM 01:00 PM

Declaration: I have read the "Guidelines for Remote Proctored Online Descriptive and MCQ mode of examinations and I agree to abide by it". I have written the answers to the questions in the answer sheets and they are 2 pages in total. I take full responsibility for appearing for online remote proctored descriptive and MCQ Winter 2025 university examinations, scan/take photographs and upload the answer scripts in to the online system.



10/01/2026  
Signature and Date

(TO BE PRINTED OR HAND WRITTEN)

Details to be handwritten only

① Describe three tier architecture of a database management system?

⇒ The three tier architecture of presentation layer (user interface) Application layer (business logic and processing) and database layer (data storage and management) it improve security scalability and data ~~inden inde~~ independence?

② Define a DBMS and explain its Role managing data within organization

⇒ A database management system (DBMS) is software that allow user to store retrieve update and manage data efficiently it ensure data security reduces redundancy maintain consistency and support multiuser access.

④ Different normal forms of database normalization?

⇒ ★ 1NF No repeating groups ~~at~~ atomic values

★ 2NF No partial dependency

★ 3NF No transitive dependency

★ BCNF Stronger form of 3NF ensuring every determinant is a candidate key

⑤ Explain the fundamental concepts of ERM in conceptual data modeling.

⇒ ERM includes Entities (Real world object) Attributes (properties of entities) Relationship connection between entities and Key unique identifier it used conceptual database design.