



**MBA DEGREE EXAMINATIONS: NOV/DEC 2023**

(Regulation 2021)

Third Semester

**MASTER OF BUSINESS ADMINISTRATION**

P21MBE0184: Database Management Systems

**COURSE OUTCOMES**

**CO1:** Explain the understanding of the fundamental principles of Database Management systems

**CO2:** Display the competence to manage data using Database Management Systems.

**CO3:** Build an appropriate Database Design based on the business problem

**Time: Two Hours**

**Maximum Marks: 50**

**PART A (1 x 18 = 18 Marks)**

- 1                      The railway reservation system facilitates the passengers to enquire                      CO3 [K<sub>6</sub>]  
about the trains available based on source and destination, booking  
and cancellation of tickets, enquire about the status of the booked  
ticket, etc. The record of trains includes its number, name, source,  
destination, and days on which it is available, whereas record of train  
status includes dates for which tickets can be booked, total number of  
seats available, and number of seats already booked.

Create a database design for the reservation system of the railways.  
Your answer must contain Description of Tables, Procedures and ER  
diagram for the Database design.

**PART B (2 x 4= 8 Marks)**

- 2                      What is a relational database management system (RDBMS). Draw                      CO1 [K<sub>1</sub>]  
the RDBMS architecture.
- 3                      Distinguish between the different degrees of data abstraction in                      CO1 [K<sub>4</sub>]  
Database Management Systems

**PART C (3 x 8 = 24 Marks)**

- 4                      Simplify Codd's rules for a database design using an example of your                      CO2 [K<sub>4</sub>]  
choice.

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|---|---|---|-----------------------|
| 5 | a | Explain the different types of Constraints in Database Management Systems | CO2 [K <sub>5</sub> ] |
|   | b | Distinguish between tables and views in a relational database             | CO2 [K <sub>4</sub> ] |
| 6 |   | Explain Concurrency control in DBMS with examples                         | CO2 [K <sub>5</sub> ] |

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