

Code No.: CS301PC

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H.T.No.

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CMR ENGINEERING COLLEGE: : HYDERABAD  
UGC AUTONOMOUS

II-B.TECH-I-Semester End Examinations (Supply)- June- 2022  
DATABASE MANAGEMENT SYSTEMS  
(Common to CSE, CSC & CSD)

[Time: 3 Hours]

[Max. Marks: 70]

- Note:** 1. Answer any FIVE questions. Each question carries 14 marks.  
2. All questions carry equal marks.  
3. Illustrate your answers with NEAT sketches wherever necessary.

5X14=70

1. a) Compare File Systems versus DBMS? [7M]  
b) What is an E-R model? Illustrate an E-R Diagram for online library management system? [7M]
2. a) Discuss in detail about the properties of Relation Algebra? [7M]  
b) What is an Integrity Constraint? Explain various types of Integrity Constraints? [7M]
3. a) Explain the following operators in SQL with examples: [7M]  
i) SOME ii) IN iii) EXCEPT  
b) What is meant by Functional Dependency? Discuss about Fourth and Fifth Normal Form? [7M]
4. a) How transaction management supported in SQL? Explain. [7M]  
b) Explain Indexed Sequential Access Method (ISAM)? [7M]
5. a) Explain Deletion and Insertion operations in ISAM with an example? [7M]  
b) Explain Extendible Hashing? [7M]
6. a) Explain about various database users and administrators in DBMS? [7M]  
b) Explain the architecture of Database Management System with a neat diagram? [7M]
7. a) What are the statements used in SQL for destroying and altering tables? [7M]  
b) Write about logical data base design? [7M]
8. a) Write about complex integrity constraints in SQL? [7M]  
b) What are the problems of redundancy? Explain with an example? [7M]

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