Shri Vile Parle Kelavani Mandal's
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC Accredited with "A" Grade (CGPA : 3.18)

End Semester Examination (February 2022)
Academic Year: 2021-2022

Max. Marks: 50	Duration: 2 Hrs.
Class: Second Year B. Tech	Semester: III
Course: Database Management Systems	Course Code: DJ19CEC304
Program: Computer Engineering	

Instructions:
(1) Solve ANY FIVE questions.
(2) Read the questions carefully.
(3) Assume suitable data wherever required, but justify it.
(4) All questions carry equal marks.
(5) Answer to each new question is to be started on a fresh page.
(6) Figure to the right indicate full marks.
(7) Draw the neat labelled diagrams wherever necessary.

Question No.		Max. Marks
Q1(a)	Describe the overall architecture of DBMS with suitable diagram.	05
Q1(b)	Define Data Fragmentation? Explain any one type of data fragmentation with example.	05
Q2	Draw an ER diagram and convert it into relational model for a Company, which has several Employees working on different types of projects. Several Employees are working for one Department every Department has a manager. Several Employees are supervised by one Employee.	10
Q3	Explain types of integrity constraints with example.	10
Q4	What is Normalization process? Explain 1NF,2NF,3NF and BCNF with example.	10
Q5 (a)	Write short note on Shadow Paging.	05
Q5 (b)	What is transaction? Discuss ACID properties of Transaction.	05
Q6(a)	Explain various types of Joins in SQL.	05

Q6(b)	Explain Weak and Strong entity set with example.	05

All the Best!