K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

July-Aug 2025
~~May-June 2025~~

(B. Tech) Program: EXTC   Scheme : IIB

Supplemantry ~~Regular~~ Examination: TY Semester: VI

Course Code: EXDLC6054 and Course Name: Database Management System

Date of Exam: 02/08/25   Duration: 02.5 Hours   Max. Marks: 60

Instructions:
(1) All questions are compulsory.
(2) Draw neat diagrams wherever applicable.
(3) Assume suitable data, if necessary.

Q. No.	Question	Max. Marks	CO	BT level
Q 1	Solve any **two** questions out of three: (05 marks each)	10		
a)	Which are the users of database system?		CO1	U
b)	Explain Security levels and Authorization in detail?		CO6	U
c)	Explain Set Operations in SQL with example?		CO3	U
Q 2	Solve any **two** questions out of three: (05 marks each)	10		
a)	Write short note on : " Views in SQL "		CO4	U
b)	Explain states of the transaction in detail?		CO5	U
c)	Construct an E-R diagram for a hospital with a set of patients and a set of medical doctors. Associate with each patient a log of various tests and examinations conducted.		CO2	U
Q.3	Solve any **two** questions out of three. (10 marks each)	20		
a)	What is transaction? Explain its ACID properties in detail?		CO6	U
b)	Explain different SQL DML commands with examples.		CO2	U
c)	Explain in detail the overall architecture of DBMS with the diagram		CO1	U
Q.4	Solve any **two** questions out of three. (10 marks each)	20		
a)	Explain relational algebra operations with suitable example		CO4	U
b)	Explain various types of Attributes and relationships with example.		CO5	U
c)	What is Normalization? Explain different normal forms with examples?		CO3	U

Seat No.: