School of Computing Science and Engineering
BCA
Summer Term - September 2023

Time : 3 Hours   Marks : 50

SEM III - B070303T - DATABASE MANAGEMENT SYSTEM
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1.	Define database management system	CO1	(2)
2.	Explain GROUPBY Clause with example	CO2	(2)
3.	Define Normalization in a Database?	CO3	(2)
4.	Show all types of data models in DBMS.	CO4	(2)
5.	Explain durability. Why is it important? Give an example.	CO5	(2)
6.	Mention the advantages of using DBMS and also List various applications of DBMS?	CO1	(5)
7.	What is an Attribute? Explain its Types	CO2	(5)
8.	Explain the following SQL constructs with examples: a) order by b) group by and having c) as select	CO6	(6)
9.	Name various type of normal form. Explain any two normal forms with help of the example.	CO3	(8)
10.	Consider the following tables: Employee (Emp_no, Name, Emp_city) Company (Emp_no, Company_name, Salary) i. Write a SQL query to display Employee name and company name. ii. Write a SQL query to display employee name, employee city ,company name and salary of all the employees whose salary >10000 iii. Write a query to display all the employees working in 'XYZ' company	CO4	(8)
11.	Draw a transaction state diagram and describe each state that transaction goes through during its execution.	CO5	(8)