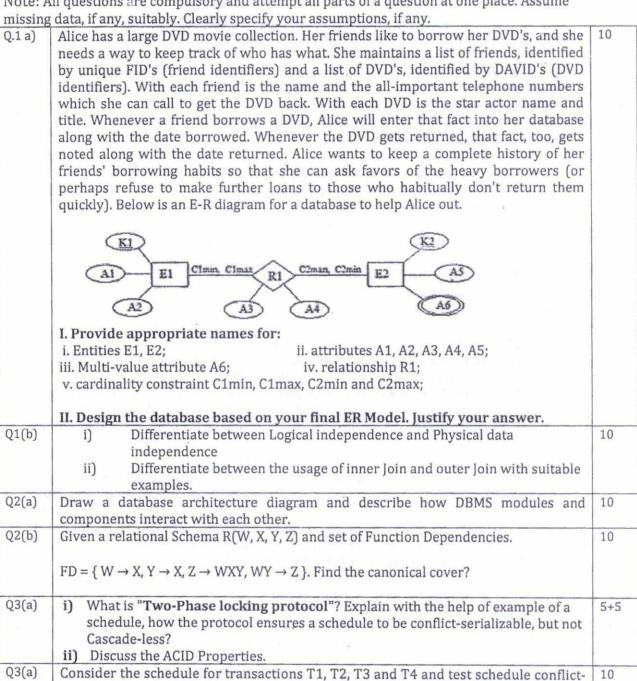
Thapar Institute of Engineering & Technology, Patiala Department of Computer Science & Engineering

Auxiliary Examination

B.E (Second Year): Semester- IV		Course Code:UCS310 Course Name: Database Management System		
31 August, 2023, 5.30-8.30 PM Time: 3 Hours, Max Marks:100		Name of Faculty: Dr. Geeta Kasana		

Note: All questions are compulsory and attempt all parts of a question at one place. Assume



serializable and recoverable or not, write the explanation about why or why not?

	T1	T2	ТЗ	T4			
		Reads(X)	Writes(X)				
	Writes(X)		Commit				
	Commit	Writes(Y) Reads(Z) Commit					
				Reads(X) Reads(Y) Commit			
4(a)	Why do we need normalization? Discuss the different normal forms with examples.						
4(b)	Write the SQL statements to answer the given queries using following relations of a book club Members (Member_id,Name,Designation,Age) Books (book_id,Book_title,Book_author, Book_Publisher, Book_price) Reserves (Member_id, Book_id, Date) i) Find the names of members who are professors and older than 45. ii) List the titles of books reserved by professors. iii) Find IDs of members who have not reserved books that cost more than Rs 500. iv) Find the authors and titles of books reserved on 27-may-2007						
(5(a)	Consider the following database: Employee(eno,ename, job, branch_id) Branch(branch_id, branch_name) Write the PL/SQL code to perform following operations: i) Write a function that Accept the branch number and calculate the number of employees in that branch and finally return the number of employees. ii) Write a procedure that accept the branch number from already created function and return the count of employees for the branch number accepted. Also, If employee count is less than 2 then delete the employees belonging to that branch followed by deleting the branch.						
(25(b)	The bank manager of Thapar University branch decides to activate all those accounts, which were previously marked as inactive for performing no transactions in last 365 days. Write a PL/SQL block to update the status of accounts. Display an appropriate message based on the number of rows affected by the update fired. Consider following database to perform given task: Account_Master (Account_number, Status, Balance, Branch_Number) Branch (Branch_Number, Name)						
25(c)	Write a cursor to calculate the total salary of first n records of emp table having columns empno, ename, salary. The value of n is passed to cursor as parameter.						