II Year IV Semester **CS210 DATABASE MANAGEMENT SYSTEMS** held on 04.03.2025

Time: 1 Hour 40 mts   Maximum:25 Marks

Answer ALL Questions

PART – A (2x5=10 marks) ANSWER ANY 5 QUESTIONS

Sl.no.	Question	Marks	Course Outcomes (C01/C02/C03/C04/C05/ Combinations)	Blooms Taxonmy levels
01	Distinguish between total participation and partial participation with an example.	2	CO1	L1,L2
02	Illustrate atomicity anamoly and concurrency control anamoly with an example.	2	CO1	L2
03	How is a multivalued attribute represented in relational model?	2	CO1	L2
04	State the significance of three levels of abastraction	2	CO1	L1
05	How is a transaction different from applications	2	CO1	L2
06	Differentiate recursive relationship and identifying relationship. Give examples	2	CO1	L1
07	State true or false For one logical schema there is only one physical schema.(True/False) The database operations could be carried out without having a file system and operating system(True/False)	2	CO1	L2

Total marks for co1 - 10

PART – B (3x5=15 marks) question 2 is compulsory

Sl.no.	Question	Marks	Course Outcomes (C01/C02/C03/C04/C05/ Combinations)	Blooms Taxonmy levels
01	You are asked to design a database system for election information system. The system should maintain details of the voters,constituency,wards. write down the requirements of the system and mention any assumptions if any. Identify entities, entity types,attributes attribute types,cardinality ratio,relationships among entities. Draw the ER diagram List for what queries your information system would give	5	CO1	L6

		answers		CO2		L3,l4
02		Consider the schema which strores patient details,doctor details ,ward admission details Patient-details = {patient id, patient name, address, disease, doctor-id, admission date,time, discharge date} Doctor-details = {doctor id, doctor name, address, landline number, mobile number,email id } Ward-details = {ward id, bed id, patient id, amount/day, status(free or occupied)} Patient ward details = {ward id, bed id, patient id, no-of-days stayed(derived attribute), amount} add any attributes if needed to solve the queries and mention what you have added 1. List the patients who have consulted Dr Ram three days before today 2. List the patients who have been discharged from ward number 2 bed number 10 on 23.06.2022 3. list the patients who got admitted in ward number 3 with name sam treated by Dr govind 4.print a bill for patient 'hari' suffering from heart disease who stayed in the hospital. [note — calculate number of days stayed from the admission and discharge date	5			
03		With a neat diagram explain the database architecture elaborating on each component	5	CO1		L1
04		State the syntax and purpose of the following sql commands 　1. Join command 　2. Alter table command 　3. In operator 　4. Primary and foreign key constraints 　5. Ltrim,char-length,concat	5	CO2		L2
05		Outline the design constraints to be considered while designing a database system with generalization/specialization hierarchy	5	CO1		L1