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## Vivekananda College of Engineering & Technology, Puttur [A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®] Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08 Rev 1.10 (CSE) <15/11/22>

## CONTINUOUS INTERNAL EVALUATION - 1

Dept: CSE	Sem / Div: 5 <sup>th</sup> A & B	Sub: DataBase Management System	S Code:18CS53
Date:22/11/22	Time: 9:30-11:00am	Max Marks: 50	Elective:N

Note: Answer any 2 full questions, choosing one full question from each part.

Q	N	Questions	Marks	RB T	CO's			
PART A								
1	a	Explain the main characteristics of the database approach versus the file processing approach	10	L2	CO1			
	b	Explain the three-schema architecture with neat diagram. Why do we need mappings among schema levels? How do different schema definition languages support this architecture?		L2				
		Define the following with an example: (i) Weak entity type (ii) participation constraint (iii)cardinality ratio (iv) recursive relationship (v) specialization	5	L2	CO1			
1	_	OR						
2		Discuss various components of the DBMS with neat	10	L2	CO1			
-	b	diagram  Develop an ER diagram for Airlines database scheme with atleast five entities and specify primary key, structural constraint and week entity type.	10	L2	CO1			
1	c	Define the following terms	5	L2	COI			
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11	1. database 2. database catalog 3. entity 4. snapshot 5. degree of relationship								
	PART B								
a	Consider the following relational database schema cosisting of the four-relation schema:	n-	10	L3	CO2				
	Works(Pname,Cname,Salary)								
	Lives(Pname,Street,City)								
-	Located-in(Cname,City)								
-	Manager(Pname,mgrname)								
-	write the SQL query for the following:  i) Find the names of all persons who live in the city Mumi ii) Retrive the name of all persons of 'Infosys' whose salary is between 30,000 and 50,000 iii) find the name of persons who live and work in sal city iv) write a scheme diagram for the above relations b Describe the characteristic of Relation with sui example c Discuss EQUIJOIN and NATURAL JOIN with sui example using relational algebra notation	me table	10		CO2				
OR									
4	a Explain briefly domain, key, integrity and refer integrity constraints with example	ential	10	L2	CO2				
t	b Describe the set theory based operation on relations suitable examples			L					
	c Explain SELECT and PROJECT operations in rela	ntional	5	L	2 CO2				

Prepared by: Bharathi K/ Shwetha C H