

Dr. Ambedkar Institute of Technology, Bangalore – 56 (An Autonomous Institution Affiliated to Visvesvaraya Technological University, Belgaum)

5th Semester B.E. Degree (Autonomous) Continuous Internal Evaluation - II Odd Semester 2020-21

Date: 22-12-2020	Sub. Title : Data Base Management System	Timings: 1.30 PM - 2.30 PM		
Day : Tuesday	Sub. Code: 18CS53	Time duration : 1hour		
Programme : B.E (CSE)		Max marks : 25		
Semester: V	CIE – II	Staff in-charge : Mrs. Asha Mrs. Veena Potdar		

Q. No.		Note: Answer ALL the questions	Marks	Course Outcomes	BTL* Cognitive Level	
1.	a)	Briefly discuss the different types of UPDATE operations on relational database. Show with an example constraint violated in each of the update operation.		CO2	L2	
	b)	Explain 2NF & 3NF and show how the normalization is achieved in case of a violation with the help of examples.	5 M	CO4	L2	
2.	a)	Explain any two set operations in relational algebra. Illustrate the same with the help of suitable examples.	5 M	CO2	L2	
	b)	Explain Multi-valued Dependencies, Fourth Normal Form with examples.	5 M	CO4	L2	
		OR	The same			
	c)	Consider the following schema Sailors(Sid,Sname,Rating,age) Boats(Bid,Bname,color) Reserves(Sid,Bid,day) Write queries in relational algebra 1. Write the names of sailor who have reserved boat number 103. 2. Display names of sailor who have reserved green and red boat. 3. Find the names of sailors who have not reserved a red boat. 4. Find all sailors with a rating above 7. 5. Find the colors of boats reserved by Andy.	5 M	CO2	L2	

BTL* - Bloom's Taxonomy Level

Name & Signature of Faculty

Mrs. Asha - Ar Mrs. Veena Potdar - 4 Approved By HOD

		(Quiz/Objective Type	Qu	iestions	Sub C	Code: 18CS53			
A	A weak entity type always has awith respect to its identifying relationship									
A	Total participation constraint	В	Partial Participation Constraint	С	Both A and B	D	Either of A or B			
2 Phone number is best suited example of										
A	Multi valued attribute	В	Key attribute	С	Desired attribute	D	None of these			
3 An entity set that does not have sufficient attributes to form a primary key is a										
A	Weak entity set.	В	Strong entity set.	С	Simple entity set.	D	Primary entity set.			
	produces the rel	atior	that has attributes of	R1	and R2					
A	Cartesian product	В	Difference	C	Intersection	D				
5 Which of the following operation is used if we are interested in only certain colum							mns of a table?			
A	PROJECTION	В	SELECTION	C	UNION	D	JOIN			
6 Relational Algebra is										
A	Data Definition Language	В	Meta Language	С	Procedural query Language	D	None of the above			
7 In unary relational operations, the SELECT operation is partition of relation usually cla						ally classified as				
A	Vertical partition	В	Insert partition.	С	Horizontal partition	D	Delete partition.			
Th	ne operators in SELECT	Гор	eration statement such	n as	'and', 'or' and 'not'	are cla	assified as			
A	Tuple operators	В	String operators	С	Boolean operators	D	Insertion operators			
W	hich of the operations of	cons	titute a basic set of op	erat	tions for manipulation	ng rela	ational data?			
A	Predicate calculus	В	Relational calculus	С			None of the above			
Which of the following operations need the participating relations to be union compatible?										
A	UNION	В	INTERSECTION	C	DIFFERENCE	D	All of the above			
	A Array A A Ree A In A W A A W A W A A W W A A A W W A A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W A A W W W W A A W W W A A W W W A A W W W A A W W W A A W W W W A A W W W W A A W W W W A A W W W W A A W W W W A A W W W W A A W W W W W W A A W W W W W A A W W W W W A A W W W W W A A W W W W W A A W W W W W A A W W W W W W A A W	A Total participation constraint Phone number is best suit A Multi valued attribute An entity set that does no A Weak entity set.	A weak entity type always has A Total participation constraint B Phone number is best suited example. B A Multi valued attribute A Multi valued attribute A Weak entity set. B produces the relation B Which of the following operators A PROJECTION B Relational Algebra is A Data Definition Language In unary relational operations A Vertical partition B Which of the operations construction of the operators in SELECT operators A Predicate calculus B Which of the following operators A Predicate calculus B Which of the following operators A Predicate calculus B Which of the following operators	Note: Answer ALL A weak entity type always has a with respectively. With respect to peration constraint A Total participation constraint Phone number is best suited example of A Multi valued attribute An entity set that does not have sufficient attributes. A Weak entity set. B Strong entity set. produces the relation that has attributes of the following operation is used if we are which of the following operation is used if we are a PROJECTION B SELECTION Relational Algebra is A Data Definition Language In unary relational operations, the SELECT operation is used in the set of the partition. The operators in SELECT operation statement such a Tuple operators Which of the operations constitute a basic set of operation of the following operations need the particinal calculus which of the following operations need the particinal calculus are set of the constraint of the particinal calculus are set of the constraint of the particinal calculus are set of the constraint of the constraint of the particinal calculus are set of the constraint of the particinal calculus are set of the constraint of the particinal calculus are set of the constraint of the co	Note: Answer ALL the A weak entity type always has a with respect to a with respect to a with respect to the constraint with respect to a with respe	Note: Answer ALL the questions A weak entity type always has awith respect to its identifying rel A Total participation constraint Phone number is best suited example of A Multi valued attribute An entity set that does not have sufficient attributes to form a primary key A Weak entity set. B Strong entity set. C Simple entity set. produces the relation that has attributes of R1 and R2 A Cartesian product B Difference C Intersection Which of the following operation is used if we are interested in only certain A PROJECTION B SELECTION C UNION Relational Algebra is A Data Definition Language In unary relational operations, the SELECT operation is partition of relation A Vertical partition B Insert partition. C Horizontal partition The operators in SELECT operation statement such as 'and', 'or' and 'not' an	Note: Answer ALL the questions A weak entity type always has a with respect to its identifying relations with respect to its identifying relations. A Total participation B Partial Participation			