



PMAS Arid Agriculture University Rawalpindi

University Institute of Information Technology
MID Term Examination ,Spring 2023

CS-400: DataBase System
(BSCS/BSSE 2B/4A/B E)

Registration No. _____

Total Time: 60 Mins

Maximum Points:18

(4*2=08Marks)

O. No. 1

Provide to the point Answer of the following questions illustrate your Answer with example.

- 1) What is the difference between an cardinality and participation?
- 2) Explain the objectives of three Level architectures when examined under the following topics: maintainability, reliability, performance and security.
- 3) Describe the use of various DBMS software tools that allow the performance of queries to be monitored.
- 4) Write a single sentence with a simple example (based on any relation) to illustrate the following relational concepts...
 - Candidate Key
 - Composite Key
 - Primary key

Q. No. 2 Draw ER Diagram for the following Description.

(04 Marks)

. Create an ERD for a car dealership. The dealership sells both new and used cars, and it operates a service facility. Base your design on the following business rules. A salesperson may sell many cars, but each car is sold by only one salesperson. A customer may buy many cars, but each car is bought by only one customer. A salesperson writes a single invoice for each car he or she sells. A customer gets an invoice for each car he or she buys. A customer may come in just to have his or her car serviced; that is, a customer need not buy a car to be classified as a customer. When a customer takes one or more cars in for repair or service, one service ticket is written for each car. The car dealership maintains a service history for each of the cars serviced. The service records are referenced by the car's serial number. A car brought in for service can be worked on by many mechanics, and each mechanic may work on many cars. A car that is serviced may or may not need parts (e.g., adjusting a carburetor or cleaning a fuel injector nozzle does not require providing new parts).

Q. No. 3 Given the relation tbl_session, tbl_student containing 3000 Records. Write proper SQL (Oracle syntax) queries for the following quires Description.

tbl_student						
Std_id	Std_name	Std_degree	S_id	DOA	Section	Gender
12-arid-789	Muhmmad Ali	BSIT	1	1-oct-19	A	1
13-arid-776	Kalsoom Arif	BSCS	3	8-oct-21	C	0
14-arid-202	Faisal Ijaz	BBA	5	6-nov-22	B	1
16-arid-400	Naim Islam	MS	4	28-nov-20	A	1
12-arid-766	Sidra Batool	DVM	22	8-oct-23	D	0

(10Marks)

1. Show All data of students whose s-id 1 to 4
2. Write a query to show the numeric position of 'oo' whose name containing 'oo' or 'mm'.
3. Write a query to show only std_id and std_name of whose students Gender is 1.
4. Insert data only in std_id , std_name. Table name tlb_student.
5. Change the column name of Std_id to Stduent_ID permanent.