

Inter-State Institution of Higher Education
Cameroon's office

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Tuesday 04 may 2021

CA Introduction to Databases

BA1

Time allowed : 2hrs

Part 1

- 1- Data, Information system, Database Management Systems, Communication 2mks
- 2- Give the difference between 2-tier and the 3-tier client architecture 3mks
- 3- What does ANSI-SPARC stand for? 1mk
- 4- State the commands of the Data control Language 2mks

Part 2 12mks

Create an ERD and derive the relational model 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 sales person may sell many cars, but each car is sold by only one sales person.
- A customer may buy many cars, but each car is bought by only one customer.
- A sales person 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 does not need to 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).