

# [Entrance examination system essay sample](https://assignbuster.com/entrance-examination-system-essay-sample/)

An entity-relationship (ER) diagram is a specialized graphic that illustrates the relationships between entities in a database. ER diagrams often use symbols to represent three different types of information. Boxes are commonly used to represent entities. Diamonds are normally used to represent relationships and ovals are used to represent attributes.

Below are two (2) problems for you to answer. Read the instructions carefully for you to be guided on what to do. After answering the examination, please be reminded that you are instructed to do the following: 1. Encode your answers using Microsoft Word. Save the file following this format: \_midterm\_sadsign. Example is roldan\_midterm\_sadsign.

2. Send the file as an attachment tobefore midnight of January 29, 2013. Late submission will not be entertained and will automatically have a grade of zero (0). Use the filename of the file as the SUBJECT for your email. 3. Refrain from distributing your answers to your classmates.

Entity-Relationship (E-R) Diagram Problem No. 1   
Create an ER diagram for the following application from the manufacturing industry:   
1. Each supplier has a unique name.   
2. More than one supplier can be located in the same city.   
3. Each part has a unique part number.   
4. Each part has a colour.   
5. A supplier can supply more than one part.   
6. A part can be supplied by more than one supplier.   
7. A supplier can supply a fixed quantity of each part.

Entity-Relationship (E-R) Diagram Problem No. 2   
The Motor Vehicle Branch administers driving tests and issues driver’s licenses. Any person who wants a driver’s license must first take a learner’s exam at any Motor Vehicle Branch in the province. If he/she fails the exam, he can take the exam again any time after a week of the failed exam date, at any branch. If he passes the exam, he is issued a license (type = learner’s) with a unique license number. The person may take his driver’s exam at any branch any time before the learner’s license expiry date (which is usually set at six months after the license issue date). If he passes the exam, the branch issues him a driver’s License.

Create an E-R diagram following these steps.   
1. Find out the entities in the specifications.   
2. Find out the relationships among the entities.   
3. Figure out attributes of the entities and (if any) of the relationships.   
4. Figure out constraints between entities and relationships.   
5. Check to see if you miss anything in the specifications.