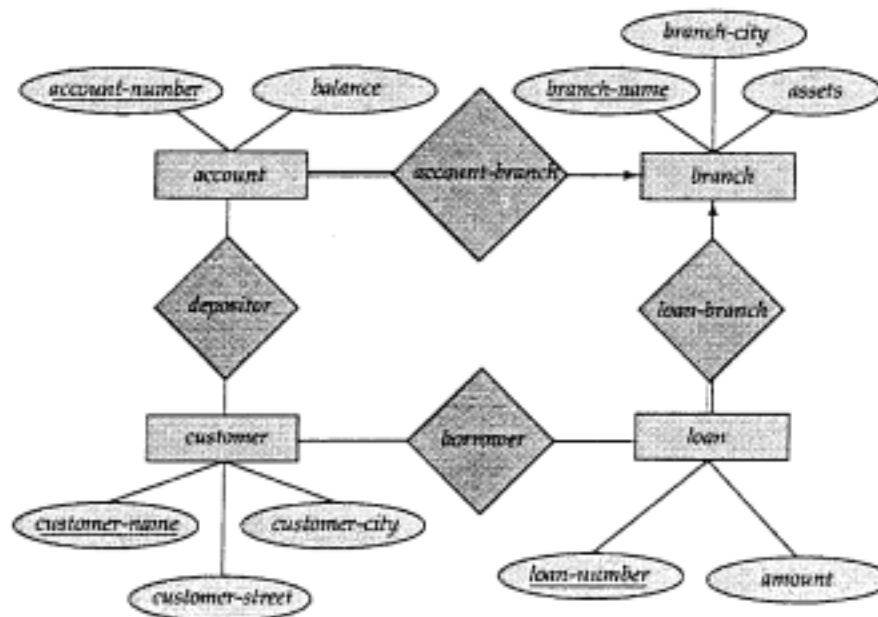


1. Explain the importance for software measurement, and describe the key stages in software measurement process. (20%)
2. Discuss the benefits of using prototyping in the software process. For large systems development, what type of prototyping is better and why? (20%)
3. Consider the following E-R diagram, (a) to convert the diagram to relational tables; (b) to draw the corresponding schema diagram. (20%)



4. To ensure integrity of the data, database systems must maintain the ACID properties of the transactions. List the ACID properties and explain the usefulness of each. (16%)
5. Write the prefix and the postfix forms of the following expressions: (12%)
 - (a) $A / B - C + D * E - A * C$
 - (b) $(A + B) * D + E / F + A * D + C$
6. Give the algorithms for preorder, inorder, and postorder traversal of a binary tree. (12%)