CS 445 Exam 2 Review Questions

E-R Diagrams
See attached.

Functional Dependencies & Normalization

Definitions (FD, key, super key, 3rd normal form, BCNF)
3NF vs BCNF

19.4.1
19.7.1 Change part (b) to: Is R in 3NF? If no, put it into 3NF.
Change part (c) to: Is R in BCNF? If no, put it into BCNF. Does this new breakdown preserve all dependencies and is it lossless?
19.8.2

Advanced SQL:
Sub-queries
Indexes
When to use, what is the benefit of. Given a table definition and query, what should the indexes be?

Text matching
Control flow (IF, IFNULL)
Having

Using your assignment one database:
List all properties that have an asking price of more than $700,000 per acre.
List all properties that have a below average asking price of $ per room.
List all properties as either LUXURY or FAMILY. A LUXURY home has more than 6 rooms, a FAMILY home has 6 or fewer rooms.
Example output: 14 Elm Street, FAMILY
11 Main St, LUXURY

List all properties as either EXTRA V AGANT, LUXURY or FAMILY. A, EXTRA V AGANT home has more than 10 rooms, a LUXURY home has 10 to 7 rooms, a FAMILY home has 6 or fewer rooms.
Example output: 14 Elm Street, FAMILY
11 Main St, LUXURY
12 Marvin Gardens, EXTRA V AGANT

List all undeveloped properties that have 2 or more offers.
List all undeveloped properties that have 1 or more offers but have not been sold.
List all properties in Oregon that have 0 offers made.

See the questions at the end of
http://zeus.cs.pacificu.edu/chadd/cs445f09/Lectures/cs445_advancedSQL.pdf