Terminology List for Final Exam

The material eligible for the final exam covers pretty much what was on Exam 2 + other material we covered after the pigeonhole principle.

So, for definitions and theorems that you should be able to state, you should use the same list as for Exam 2 + the following:

countable set
uncountable set
denumerable set
for two cardinal numbers $m,n$ the definition of

\[
m + n \\
m \cdot n \\
m^n
\]

statement of Cantor-Schroeder-Bernstein Theorem

a theorem (not the definition of countable) that said: a set $A$ is countable iff ...
a theorem (the definition of infinite) that said: a set $A$ is infinite iff ...

a theorem about when the union of countable sets is countable; about when a product of countable sets is countable.

algebraic number
transcendental number

definition of $m \leq n$ and $m < n$ where $m$ and $n$ are cardinal numbers

rational number (formal definition)
definition of addition, subtraction, multiplication and in the formal system $Q$