For learning (and exam) purposes, you should be able to give definitions of the following terms for the final exam. These items come from what we covered in Chapters 4-6

Notes: 1) while a paraphrase of a definition is ok, it must be correct. Sometimes students, when trying to paraphrase, actually misstate the definition making it incorrect. The safest things, with definitions, is to memorize them as given.

2) If a definition of a term is asked for, then actually give the definition, NOT some other statement equivalent to the definition.

For example, if asked: the $n \times n$ matrix A is invertible means: ________ then, don't answer "A has n pivot positions." Yes, that statement is equivalent to saying A is invertible, but it wasn't the definition of invertibility.

Definitions (note that there is a Glossary in the appendix of the textbook, starting on p. A7, where terms and definition are collected together.)

subspace of a vector space (p. 193)
the null space of a matrix (p. 199) / the kernel of a linear transformation T (p. 204)
the column space of a matrix / the range of a linear transformation T (p. 201)
basis for a subspace of a vector space (p. 209)
the coordinate vector of $\boldsymbol{x}$ with respect to a basis $\mathcal{B}$ (p. 216)
the change of coordinates matrix (for example, from $\mathcal{B}$-coordinates to standard coordinates or in the opposite direction) (p. 219)
isomorphism (p. 220)
the dimension of a vector space (p. 226)
the rank of a matrix A p. 283

eigenvector of a matrix A (Notes on *Introduction to Diagonalization, or p. 267)*
eigenvalue of a matrix A (Notes on *Introduction to Diagonalization, or p. 267*)
the eigenspace of a matrix A corresponding to an eigenvalue λ (*p. 268*)
diagonalizable matrix (Notes on *Introduction to Diagonalization, or p. 282*)
the characteristic polynomial of a square matrix (*p. 276*)
similar matrices A and B (*p. 277*)

define length of a vector and distance between two vectors in $\mathbb{R}^n$ in terms of inner product (*p. 331, 333*)
define orthogonal vectors (*p. 334*)
define the orthogonal complement of a subspace W of $\mathbb{R}^n$ (*p. 334*)
state the formula relating the angle between vectors and the inner product (*p. 335*)
define the orthogonal projection of a vector $\boldsymbol{y}$ onto a vectur $\boldsymbol{u}$, and the compoent of $\boldsymbol{y}$ orthogonal to $\boldsymbol{u}$ (*p. 339*)
define an orthogonal matrix (*p. 344*)

You should be able also

to state the Spanning Set Theorem (p. 210)
to describe/find bases for Nul(A) and col(A) (pp. 211-212)
to describe the matrices that you multiply by to change from $\mathcal{B}$-coordinates to standard coordinates, and from standard coordinates to $\mathcal{B}$-coordinates (p. 219)
to state a theorem about expanding a set of vectors to a basis (p. 227)
to state the Basis Theorem (p. 227)
to state the Rank Theorem (p. 233) (using rank as defined in terms of the column space)
to state a theorem about when a square matrix is diagonalizable (Notes on *Introduction to Diagonalization*)
to state a theorem about eigenvectors that have different eigenvalues (*p. 270*)
to find the eigenvalues for A in simple cases (*the main idea on pp. 276-7*)
to diagonalize a matrix A, when possible, in simple cases (*pp. 283-284*)
write the matrix for a linear transformation $T : V \to W$ with respect to bases $\mathcal{B}$ for W and $\mathcal{C}$ for W. (*p. 289*)
to state the Orthogonal Decomposition Theorem (*p. 348*) and the Best Approximation Theorem (*p. 350*)
to describe and use the Gram Schmidt Process (*p. 354-356*)
to state the meaning of “least squares solution” to $A\boldsymbol{x} = \boldsymbol{b}$ (*p. 360)*
state a theorem about when a least squares solution is unique (*p. 363*)
to define the normal equation for $A\boldsymbol{x} = \boldsymbol{b}$ $(p. 361)$

These lists just mention items things you might be asked directly. It's certainly not a list of every thing you need to know or every skill you should have.