Exam Computational Methods for Data Analysis (7/02/2013)

Choose any two of the following questions:

- What is the difference between supervised and unsupervised learning? Give an example of a supervised and an example of an unsupervised learning problem
- You have just performed PCA on some large dimensional data to obtain the eigenvectors- what do the eigenvectors represent/denote?; When you attempt to reconstruct the original data with the eigenvectors, how does the reconstruction error vary when you use more or less eigenvectors? Explain.
- Key concepts of statistical learning theory.
- Differences between feature representation and similarity functions in machine learning algorithms