20.1

1. The 3 stages to build the hypothesis or model in the machine learning are
   a. Model building
   b. Model testing
   c. Applying the model.

2. The standard approach to supervised learning is to split the set of example data in to training set and the test set.

3. The given dataset is divided in to Training set and test set.
   Training ~~test~~set is examples given to the learner, we build the model using training set.
   whereas test set is used to test the model. It is used to test the accuracy of the model generated by the learner

4. The general principle of ensemble method is to combine the predictions of several models built with a algorithm in order to improve the robustness over a single model.
   Bagging is a method in ensemble for improving unstable estimation or classification schemes, while boosting method is used sequentially to reduce the bias of combined model.
   Bagging an boosting reduce the errors by reducing variance.

5. By using lot of data overfitting can be avoided. overfitting happens when small dataset is used and you try to learn on that.