Part: 2 Precision-Recall curve:

We know that, a model with higher precision relates to low false positive rate and a model with higher recall relates to low false negative rate. In an ideal case it is expected that a model has good recall as false negatives are more dangerous that false positive (Ex: If an health check report is false negative, the patient may go untreated, which is about question of one's life). So, a model with higher recall is always the best (not that precision being worst is fine, a decent precision would still be expected).

After observing the P-R curve for both Naive-bayes & TAN, we can clearly see that TAN offered higher recall than Naive-bayes. Precision of TAN is comparitively better than Naive-bayes while we can see recall by TAN is substantially higher than Naive-bays. Hence TAN model is better and has more predictive power.

Thus a very high recall and better precision offered by TAN (compared with Naive bayes) makes it a more powerful predictive model.