Tampere University of Technology Faculty of Computing and Electrical Engineering

SGN-5306 Knowledge Mining (3-cr)

Examination 29.11.2010 / Ari Visa

1. How to define data and knowledge mining? What is the difference between data mining and knowledge mining? What is the relation between data mining and knowledge retrieval? What are the steps of data mining in the process of knowledge discovery?

6p

- 2. How to define association rule mining? How can the association rules be classified? What is the difference between causality and association? Does the correlation play any role? 6p
- 3. What is the difference between classification and prediction? How do you define an outlier? How does the outlier differ from the predicted value?

 6p
- 4. How do you define cluster analysis? What are the main categories of clustering techniques?

 6p
- 5. What are the mathematic requirements of a distance function? What kind of distance function do you use to compare histograms? Motivate your answer! 6p
 - No calculator
 - Students can keep the questions