Topics for examinations, Part II

- application problems
- core ideas
- advantages
- drawbacks
- limitations

Topics for examinations, Part II

10. Deductive Databases
    - extensional/intensional data bases
    - declarative semantics
    - derivation strategies
    - safety conditions
    - applications

11. Data Warehouses and OLAP
    - application areas for Data Warehouses
    - requirements for Data Warehouses
    - dimensional modelling, schemata for OLAP
    - OLAP operations

Topics for examinations, Part II

12. Data Mining
    - tasks and process model
    - data types and data preprocessing
        - treatment of outliers
        - dimensionality reduction
    - classification
        - distance-based methods
        - decision trees, random forests
        - evaluation of classifiers

Topics for examinations, Part II

12. Data Mining (cont.)
- clustering
  - partioning clustering
- association rules
  - learning of association rules
  - classification with association rules
  - association rules for sequential observations

Topics for examinations, Part II

13. Multi-dimensional Index Structures
    - types of queries
    - R-trees
    - problems with distance metrics in high-dimensional data spaces

14. Document Retrieval
    - problems, data preprocessing
    - vector space model
    - evaluation

15. Web Mining
    - page rank