

1. What is the main goal of dimensional modelling?
  - a. Produce simple end user-friendly database structures\*
  - b. Optimize the update performance
  - c. Facilitate the administration of databases
  - d. All of the above
2. Which of the following sources can be used to extract data?
  - a. Source databases
  - b. Flat (e.g. csv) and excel files maintained by business
  - c. Application Programming Interfaces (APIs)
  - d. All of the above\*
3. Which of the following is an incorrect description of a data mart?
  - a. It provides enterprise wide view of all organisational data\*
  - b. It is a subsection of a data warehouse
  - c. It focuses on a single business process
  - d. It can connect to other data marts
4. Why does data warehouse design support efficient (fast) organizational decision-making?
  - a. It provides data at the lowest level of detail
  - b. It has up to date data
  - c. It has de-normalised data\*
  - d. Both a and c
5. Which description is correct for non-volatile data?
  - a. It gets updated immediately every time data changes
  - b. Helps with historical analysis of data
  - c. Users have a "read only" access\*
  - d. All of the above
6. What visualization operator do dimension hierarchies enable?
  - a. Drill down\*
  - b. Drill across
  - c. Pivoting
  - d. All of the above
7. Chunking is a method which can be used to build a star schema. The chunking involves?
  - a. Using a Hub and spoke architecture
  - b. Using an independent architecture
  - c. Identifying tables which are classified as transactions, components and classification and using them to create facts, dimensions and hierarchy tables in the star schema
  - d. Identifying tables which are classified as transactions, components and classification and using them to create facts and dimensions in the star schema\*

8. Operational systems are not very useful for strategic information needs because:
- a. They do not have up-to-date data
  - b. The information in them is only applicable for the purpose of the process that the system is design for\*
  - c. You cannot get access to the database through the source application
  - d. They provide aggregated measures that are too difficult to understand for running a business
9. Which of the following provides the best description for a transactional database?
- a. Offers a historical perspective through archival data
  - b. Delivers a comprehensive overview over organisational data
  - c. Provides reports to the viewers when they press the 'refresh' button
  - d. Are optimized for the immediate support of a particular business process\*
10. The data to ink ratio is a way to:
- a. Improve your visualization by making specific parts of your visualization bold
  - b. Highlight important visuals with a colourful background
  - c. Improve the visual effect of your image by choosing the correct picture for your dashboard
  - d. Remove redundant features from your visual\*