



University of Technology
Department of Computer Sciences
Final Examination 2011-2012



Subject : Data Warehouse
Division: AI
Examiner: Dr. Saad K. Majeed

Year: 1st term 2012
Time: 3 Hours
Date: 27/05/2012

ملاحظه : أجب عن خمسة أسئلة فقط على ان يكون السؤال الثالث من ضمنها

الدرجات توزع بالتساوي على الاسئلة الخمسة

- Q.1 How many categories can be organized the measures and computation of data cube, based on the kind of aggregate functions used. Explain them with examples.
- Q.2 Explain with example a stare net query model for querying multidimensional database.
- Q.3 Suppose a data warehouse consist of four dimensions Date, Spectator, Location, and Game, and two measures Count and Charge, where charge is the fare that a spectator pays when watching a game on a given date.
- Draw a star schema diagram for the data warehouse.
 - Starting with the base cuboid [date, spectator, location, game], what specific OLAP operations should one perform in order to list the total charge paid by spectators at 2010.
 - If each dimension has five levels (including all) , how many cuboids will this cube contain.
- Q.4 What are the steps may data warehouse consist of from the software engineering point of view.
- Q.5 Discuss " The meaning of partial materialization and choices for data cube materialization " How can we use multi way array aggregation in the computation of data cubes.
- Q.6 What are the differences between the three main types of data warehouse usage: information processing, analytical processing, and data mining? Discuss the motivation behind OLAP mining (OLAM).

مع التمنيات بالنجاح

مدرس المادة : د. سعد كاظم مجيد