

CS614 - Data Warehousing Solved MCQS

From Final term Papers

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Question No: 1 (Marks: 1) - Please choose one

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PSMD01

FINAL TERM EXAMINATION Spring 2012 CS614- Data Warehousing

To identify the	required we need to perform data profiling
▶ Degree of Transformation	(Page 437)
► Complexity	
▶ Cost	
►Time	
Question No: 2 (Marks: 1) – l	
	own operational data, but at the same time they also use reference data
obtained from sources suc	h as codes, prices etc.
► Operational	
► None of these	
► Internal	
External (Page 21)	
Question No: 3 (Marks: 1) - Pl	ease choose one
Ad-hoc access means to run such qu	ueries which are known already.
►True	
► False (Page 18)	
Question No: 4 (Marks: 1) - Pl	ease choose one
in agriculture extens	sion is that pest population beyond which the benefit of spraying outweighs
its cost.	
► Profit Threshold Level	
► Economic Threshold Level	(Page 332)
► Medicine Threshold Level	
► None of these	

I

Question No: 5 (Marks: 1) – Please choose one People that design and build the data warehouse must be capable of working across the organization at all levels True (Page 320) False
Question No: 6 (Marks: 1) – Please choose one The is only a small part in realizing the true business value buried within the mountain of data collected and stored within organizations business systems and operational databases. ▶ Independence on technology ▶ Dependence on technology ▶ None of these
Question No: 7 (Marks: 1) – Please choose one Relational databases allow you to navigate the data in that is appropriate using the primary, foreign key structure within the data model. ▶ Only One Direction ▶ Any Direction ▶ Two Direction ▶ None of these
Question No: 8 (Marks: 1) – Please choose one DSS queries do not involve a primary key ► True (Page 21) ► False
Question No: 9 (Marks: 1) – Please choose one Data Transformation Services (DTS) provide a set of that lets you extract, transform, and consolidate data from disparate sources into single or multipledestinations supported by DTS connectivity. ▶ Tools (Page 373) ▶ Documentations ▶ Guidelines
Question No: 10 (Marks: 1) – Please choose one The need to synchronize data upon update is called ▶ Data Manipulation ▶ Data Replication ▶ Data Coherency (Page 12) ▶ Data Imitation

Question No: 11 (Marks: 1) – Please choose one Taken jointly, the extract programs or naturally evolving systems formed a spider web, also known as ▶ Distributed Systems Architecture ▶ Legacy Systems Architecture (Page 14) ▶ Online Systems Architecture ▶ Intranet Systems Architecture
Question No: 12 (Marks: 1) – Please choose one Node of a B-Tree is stored in memory block and traversing a B-Tree involves page faults. ▶ O (n) ▶ O (n2) ▶ O (n lg n) ▶ O (lg n) (Page 22)
 Question No: 13 (Marks: 1) – Please choose one Which statement is true for De-Normalization? ▶ Redundant data is a performance liability at query time, but is a performance benefit at update time. ▶ Redundant data is a performance benefit at both query time and update time. ▶ Redundant data is a performance liability at both query time and update time. ▶ Redundant data is a performance benefit at query time, but is a performance liability at update time. (Page 51)
Question No: 14 (Marks: 1) – Please choose one As apposed to the out come of classification, estimation deal with valued outcome. Discrete Isolated Continuous Distinct Page 260)
Question No: 15 (Marks: 1) – Please choose one The goal of is to look at as few block as possible to find the matching records. Indexing (Page 222) Partitioning Joining none of these
Question No: 16 (Marks: 1) – Please choose one The technique that is used to perform these feats in data mining modeling, and this act of model building is something that people have been doing for long time, certainly before the of computers or data mining technology. Access Advent click for detail

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► Ascent Avowal

Question No: 17(Marks: 1) - Please choose one

De-Normalization normally speeds up

- ► Data Retrieval (Page 51)
- ► Data Modification
- ► Development Cycle
- ► Data Replication

Question No: 18 (Marks: 1) - Please choose one

In horizontal splitting, we split a relation into multiple tables on the basis of

- ► Common Column Values (Page 54)
- ► Common Row Values
- ▶ Different Index Values
- ► Value resulted by ad-hoc query

Question No: 19 (Marks: 1) - Please choose one

For good decision making, data should be integrated across the organization to cross the LoB (Line of Business). This is to give the total view of organization from:

- ► Owner's Perspective
- ► Customer's Perspective (Page 16)
- ► Decision Maker's Perspective
- ► Employee's Perspective

Question No: 20 (Marks: 1) - Please choose one

The automated, prospective analyses offered by data mining move beyond the analysis of past events provided by respective tools typical of

- **▶**OLTP
- **►**OLAP
- **▶** Decision Support systems
- ► None of these

FINAL TERM EXAMINATION Spring 2010 CS614- Data Warehousing

Question No: 1 (Marks: 1) - Please choose one

A data warehouse may include

- ► Legacy systems (Page 135)
- ► Only internal data sources
- ► Privacy restrictions
- ► Small data mart

Question No: 2 (Marks: 1) - Please choose one

De-Normalization normally speeds up

- **▶** Data Retrieval
- (Page 51)
- ► Data Modification
- ► Development Cycle
- ► Data Replication

Question No: 3 (Marks: 1) - Please choose one

In horizontal splitting, we split a relation into multiple tables on the basis of

- ► Common Column Values (Page 54)
- ► Common Row Values
- ► Different Index Values
- ► Value resulted by ad-hoc query

Question No: 4 (Marks: 1) – Please choose one

Multidimensional databases typically use proprietary _____ format to store pre-summarized cube structures.

- **▶** File (Page 79)
- ► Application
- ► Aggregate
- **▶** Database

Question No: 5 (Marks: 1) – Please choose one

A dense index, if fits into memory, costs only _____ disk I/O access to locate a record by given key.

- **▶** One (Page 223)
- ► Two
- ► lg (n)
- ▶ n

Question No: 6 (Marks: 1) – Please choose one
All data is of something real.
I An Abstraction
II A Representation
Which of the following option is true?
► I Only (Page 180)
▶ II Only
▶ Both I & II
► None of I & II
Question No: 7 (Marks: 1) – Please choose one
The key idea behind is to take a big task and break it into subtasks that can be processed
concurrently on a stream of data inputs in multiple, overlapping stages of execution.
► Pipeline Parallelism (Page 214)
➤ Overlapped Parallelism
► Massive Parallelism
➤ Distributed Parallelism
Question No: 8 (Marks: 1) – Please choose one
Non uniform distribution, when the data is distributed across the processors, is called
► Skew in Partition (Page 218)
▶ Pipeline Distribution
▶ Distributed Distribution
► Uncontrolled Distribution
가입사는 (요즘 이 경우) 그 이 집에는 (요즘 이 경우) 그 그 이 집에 가는 (요즘 이 경우) 그 이 집에 가는 (요즘 이 경우) 그 이 집에 되었다.
Question No: 9 (Marks: 1) – Please choose one
The goal of ideal parallel execution is to completely parallelize those parts of a computation that are not
constrained by data dependencies. The smaller the portion of the program that must be executed,
the greater the scalability of the computation.
▶ None of these
► Sequentially (Page 204)
▶ In Parallel
▶ Distributed
Question No: 10 (Marks: 1) – Please choose one
If 'M' rows from table-A match the conditions in the query then table-B is accessed 'M' times. Suppose table-B
has an index on the join column. If 'a' I/Os are required to read the data block for each scan and 'b' I/Os for
each data block then the total cost of accessing table-B islogical I/Os approximately.
\triangleright (a + b)M
\blacktriangleright $(a-b)M$
\triangleright (a + b + M)

Question No: 11 (Marks: 1) − Please choose one Data mining is a/an approach, where browsing through data using data mining techniques may reveal something that might be of interest to the user as information that was unknown previously. ► Exploratory (Page 249) ► Non-Exploratory ► Computer Science
Question No: 12 (Marks: 1) – Please choose one Data mining evolve as a mechanism to cater the limitations of systems to deal massive data sets with high dimensionality, new data types, multiple heterogeneous data resources etc. ▶ OLTP (Page 254) ▶ DSS ▶ DWH
Question No: 13 (Marks: 1) – Please choose one is the technique in which existing heterogeneous segments are reshuffled, relocated into homogeneous segments. ▶ Clustering (Page 264) ▶ Aggregation ▶ Segmentation ▶ Partitioning
Question No: 14 (Marks: 1) – Please choose one To measure or quantify the similarity or dissimilarity, different techniques are available. Which of the following option represent the name of available techniques? ▶ Pearson correlation is the only technique ▶ Euclidean distance is the only technique ▶ Both Pearson correlation and Euclidean distance ▶ None of these
Question No: 15 (Marks: 1) – Please choose one For a given data set, to get a global view in un-supervised learning we use ▶ One-way Clustering ▶ Bi-clustering ▶ Pearson correlation ▶ Euclidean distance
Question No: 16 (Marks: 1) – Please choose one In DWH project, it is assured that environment is similar to the production environment ▶ Designing ▶ Development (Page 314) ▶ Analysis ▶ Implementation

Question No: 17 (Marks: 1) – Please choose one For a DWH project, the key requirement are and product experience. ► Tools ► Industry (Page 320) ► Software ► None of these
Question No: 18 (Marks: 1) – Please choose one Pipeline parallelism focuses on increasing throughput of task execution, NOT on sub-task execution time. Increasing Decreasing Maintaining None of these
Question No: 19 (Marks: 1) – Please choose one Many data warehouse project teams waste enormous amounts of time searching in vain for a
 ▶ Silver Bullet ▶ Golden Bullet ▶ Suitable Hardware ▶ Compatible Product
Question No: 20 (Marks: 1) − Please choose one Focusing on data warehouse delivery only often end up ▶ Rebuilding (Page 315) ▶ Success ▶ Good Stable Product ▶ None of these
Question No: 21 (Marks: 1) – Please choose one Pakistan is one of the five major countries in the world. ▶ Cotton-growing (Page 330) ▶ Rice-growing ▶ Weapon Producing
Question No: 22 (Marks: 1) – Please choose one is a process which involves gathering of information about column through execution of certain queries with intention to identify erroneous records. ▶ Data profiling (Page 439) ▶ Data Anomaly Detection ▶ Record Duplicate Detection ▶ None of these

Question No: 23 (Marks: 1) – Please choose one Relational databases allow you to navigate the data in that is appropriate using the primary, foreign key structure within the data model. ▶ Only One Direction ▶ Any Direction ▶ Two Direction ▶ None of these
Question No: 24 (Marks: 1) – Please choose one DSS queries do not involve a primary key True (Page 21) False
Question No: 25 (Marks: 1) – Please choose one contributes to an under-utilization of valuable and expensive historical data, and inevitably results in a limitedcapability to provide decision support and analysis. ▶ The lack of data integration and standardization (Page 330) ▶ Missing Data ▶ Data Stored in Heterogeneous Sources
Question No: 26 (Marks: 1) – Please choose one DTS allows us to connect through any data source or destination that is supported by > OLE DB (Page 373) > OLAP > OLTP > Data Warehouse
Question No: 27 (Marks: 1) – Please choose one Data Transformation Services (DTS) provide a set of that lets you extract, transform, and consolidate data from disparate sources into single or multiple destinations supported by DTS connectivity. ▶ Tools (Page 373) rep ▶ Documentations ▶ Guidelines
Question No: 28 (Marks: 1) – Please choose one Execution can be completed successfully or it may be stopped due to some error. In case of successful completion of execution all the transactions will be ▶ Committed to the database (Page 419) ▶ Rolled back

Question No: 29 (Marks: 1) - Please choose one

If some error occurs, execution will be terminated abnormally and all transactions will be rolled back. In this case when we will access the database we will find it in the state that was before the ______.

- ► Execution of package (Page 419)
- ► Creation of package
- ► Connection of package

Question No: 30 (Marks: 1) - Please choose one

To judge effectiveness we perform data profiling twice.

- ▶ One before Extraction and the other after Extraction
- **▶** One before Transformation and the other after Transformation (Page 441)
- ▶ One before Loading and the other after Loading

FINALTERM EXAMINATION Spring 2009 CS614- Data Warehousing

Question No: 1 (Marks: 1) - Please choose one

It is observed that every year the amount of data recorded in an organization is

- **▶ Doubles** (Page 15)
- **►** Triples
- **▶** Quartiles
- ► Remains same as previous year

Question No: 3 (Marks: 1) - Please choose one

Pre-computed _____ can solve performance problems

- ► Aggregates (Page 11)
- **▶** Facts
- **▶** Dimensions

Question No: 4 (Marks: 1) - Please choose one

, if fits into memory, costs only one disk I/O access to locate a record by given key.

- ► A Dense Index (Page 223)
- ► A Sparse Index
- ► An Inverted Index
- ► None of These

Question No: 5 (Marks: 1) - Please choose one The degree of similarity between two records, often measured by a numerical value between, usually depends on application characteristics. > 0 and 1 (Page 169) > 0 and 10 > 0 and 100 > 0 and 99
Question No: 6 (Marks: 1) - Please choose one The purpose of the House of Quality technique is to reduce types of risk. Two (Page 194) Three Four All
Question No: 7 (Marks: 1) - Please choose one NUMA stands for Non-uniform Memory Access (Page 206) Non-updateable Memory Architecture New Universal Memory Architecture
Question No: 8 (Marks: 1) - Please choose one Which is the least appropriate join operation for Pipeline parallelism? ► Hash Join ► Inner Join ► Outer Join ► Sort-Merge Join
Question No: 9 (Marks: 1) - Please choose one There are many variants of the traditional nested-loop join. If the index is built as part of the query plan and subsequently dropped, it is called Naive nested-loop join Index nested-loop join Temporary index nested-loop join None of these Page 243)
Question No: 10 (Marks: 1) - Please choose one Data mining derives its name from the similarities between searching for valuable business information in a large database, for example, finding linked products in gigabytes of store scanner data, and mining a mountain for a of valuable ore. Furrow Streak Trough

Question No: 11 (Marks: 1) - Please choose one With data mining, the best way to accomplish this is by setting aside some of your data in a _ it from the mining process; once the mining is complete, the results can be tested against the isolated data to confirm the model's validity. ► Cell **▶** Disk **▶** Folder **► Vault** Click here for detail Question No: 12 (Marks: 1) - Please choose one The Kimball's iterative data warehouse development approach drew on decades of experience to develop the **▶** Business Dimensional Lifecycle (Page 289) ► Data Warehouse Dimension ► Business Definition Lifecycle ► OLAP Dimension Question No: 13 (Marks: 1) - Please choose one We must try to find the one access tool that will handle all the needs of their users. **►**True **►** False (Page 315) Question No: 14 (Marks: 1) - Please choose one For a smooth DWH implementation we must be a technologist. True **►** False (Page 319) Question No: 15 (Marks: 1) - Please choose one During the application specification activity, we also must give consideration to the organization of the applications. **►**True (Page 307) ► False Question No: 16 (Marks: 1) - Please choose one Investing years in architecture and forgetting the primary purpose of solving business problems, results in inefficient application. This is the example of _____ mistake. ► Extreme Technology Design ► Extreme Architecture Design **▶** None of these (Page 315)

Question No: 17 (Marks: 1) - Please choose one The most recent attack is the attack on the cotton crop during 2003- 04, resulting in a loss of nearly 0.5 million bales. > Boll Worm (Page 333) > Purple Worm > Blue Worm > Cotton Worm
Question No: 18 (Marks: 1) - Please choose one The users of data warehouse are knowledge workers in other words they are in the organization. Decision maker (Page 18) Manager Database Administrator DWH Analyst
Question No: 19 (Marks: 1) - Please choose one breaks a table into multiple tables based upon common column values. > Horizontal splitting (Page 54) > Vertical splitting
Question No: 20 (Marks: 1) - Please choose one Execution can be completed successfully or it may be stopped due to some error. In case of successful completion of execution all the transactions will be
► Committed to the database (Page 419) rep ► Rolled back

Cs614 – Final Term Quizzes (Quiz No.3 & 4)

Quiz No.3 (7th **June 2012**)

▶ Distinct

With data mining, the best way to accomplish this is by setting aside some of your data in a vault to isolate
from the mining process; once the mining is complete, the results can be tested against the isolated data to
confirm the model's

confirm the model's
► Validity Click here for detail
► Security
► Integrity
► None of above
Question # 2 of 10 (Total M a r k s: 1)
Classification consists of examining the properties of a newly presented observation and assigning it to a
predefined
▶ Object
► Container
▶ Subject
Class (Page 259)
Question # 3 of 10 (Total M a r k s: 1)
During business hours, most systems should probably not use parallel execution.
►OLAP
▶DSS
▶ Data Mining
►OLTP (Page 206)
Question # 4 of 10 (Total M a r k s: 1)
In contrast to statistics, data mining is driven.
► Assumption
► Knowledge (Page 254)
► Human
► Database
Question # 5 of 10 (Total M a r k s: 1)
As opposed to the outcome of classification, estimation deal with valued outcome.
► Discrete
► Isolated
Continuous (Page 260)

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The goal of ideal parallel execution is to completely parallelize those parts of a computation that are not constrained by data dependencies. The _____ the portion of the program that must be executed sequentially, the greater the scalability of the computation.

- Larger
- ► Smaller (Page 204)
- **►** Unambiguous
- **►** Superior

Question #7 of 10 (Total Marks: 1)

The goal of ______ is to look at as few blocks as possible to find the matching records(s).

- ► Indexing (Page 222)
- **▶** Partitioning
- **▶** Joining
- ► None of above

Question #8 of 10 (Total M a r k s: 1)

In nested-loop join case, if there are 'M' rows in outer table and 'N' rows in inner table, time complexity is

- \triangleright O (M log N)
- ►O (log MN)
- ► O (MN)
- ightharpoonup O(M+N)

Question # 9 of 10 (Total M a r k s: 1)

If every key in the data file is represented in the index file then index is

- **▶ Dense Index** Page 223)
- ► Sparse Index
- ► Inverted Index
- None

Question # 10 of 10 (Total M a r k s: 1)

An optimized structure which is built primarily for retrieval, with update being only a secondary consideration is

- **▶**OLTP
- **▶**OLAP
- **▶**DSS
- **▶** inverted Index (Page 232)

Question # 1 of 10 (Total M a r k s: 1) Which of the following is not an "Orr's Law of Data Quality"?
 ▶ Data that is not used cannot be correct!" ▶ Data quality is a function of its use, not its collection ▶ Data will be no better than its most stringent use!" ▶ Data duplication can be harmful for the organization!" (Page 181)
Question # 2 of 10 (Total M a r k s: 1), if too big and does not fit into memory, will be expensive when used to find a record by given key.
► An Inverted Index ► A Sparse Index ► A Dense Index ► None of these Page 223)
Question # 3 of 10 (Total M a r k s: 1) Which of the following is not an activity of Data Quality Analysis Project?
▶ "Define"▶ Measure"▶ Analyze"▶ "Compression" (Page 194)
Question # 4 of 10 (Total M a r k s: 1) The automated, prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of ► OLTP ► OLAP ► Decision Support Systems ► None of these
Question # 5 of 10 (Total M a r k s: 1) Data mining, the of hidden predictive information from large databases, is a powerful new technology with great potential to help companies focus on the most important information in their data warehouses. Extraction Click here for detail Insertion Inclusion Enclosure

Question # 6 of 10 (Total M a r k s: 1) If someone told you that he had a good model to predict customer usage, the first thing you might try would be to ask him to apply his model to your customer, where you already knew the answer. Base Click here for detail Drive File Log
Question # 7 of 10 (Total M a r k s: 1) Data mining uses algorithms to discover patterns and regularities in data. Mathematical Computational Statistical None of these (Page 251)
Question # 8 of 10 (Total M a r k s: 1) Data mining evolve as mechanism to cater the limitations of systems to deal massive data sets with high dimensionality, new data types, multiple heterogeneous data resources etc OLTP (Page 254) OLAP DSS DWH
Question # 9 of 10 (Total M a r k s: 1) If 'M' rows from table-A match the conditions in the query then table-B is accessed 'M' times. Suppose table-B has an index on the join column. If 'a' I/Os are required to read the data block for each scan plus 'b' I/Os for each data block then the total cost of accessing table-B is logical I/Os approximately. Select correct option: \(\begin{align*} \begin{align*}
Question # 10 of 10 (Total M a r k s: 1) A data warehouse implementation without an OLAP tool is always possible. ► True ► False (Page 69)

Question # 1 of 10 (Total M a r k s: 1) modeling technique is more appropriate for data warehouses. ► entity-relationship **▶** dimensional Click here for detail **▶** physical ► None of the given Question # 2 of 10 (Total M a r k s: 1) The performance in a MOLAP cube comes from the O(1) look-up time for the array data structure. **►**True (Page 79) **▶** False Ouestion # 1 of 10 (Total M a r k s: 1) Multi-dimensional databases (MDDs) typically use ______ formats to store pre-summarized cube structures. **▶**SOL ▶ proprietary file (Page 79) ▶ Object oriented ► Non- proprietary file Question # 3 of 10 (Total M a r k s: 1) Slice and Dice is changing the view of the data. **►** True **►** False (Page 81) Question # 4 of 10 (Total M a r k s: 1) Data warehousing and on-line analytical processing (OLAP) are ______ elements of decision support system. **►** Unusual **Essential** (Page 69) **▶** Optional ► None of the given Question # 5 of 10 (Total M a r k s: 1) Virtual cube is used to query two similar cubes by creating a third "virtual" cube by a join between two cubes. >True **►** False (Page 86) Question # 6 of 10 (Total M a r k s: 1) Analytical processing uses ______, instead of record level access. **►** multi-level aggregates (Page 74) ► Single-level aggregates ► Single-level hierarchy ► None of the Given

Question # 7 of 10 (Total M a r k s: 1) The divide&conquer cube partitioning approach helps alleviate the limitations of MOLAP ▶ implementation. ▶ Flexibility ▶ Maintainability ▶ Security ▶ Scalability (Page 85)
Question # 8 of 10 (Total M a r k s: 1) In a traditional MIS system, there is an almost linear sequence of queries. ► True (Page 72) ► False
Question # 9 of 10 (Total M a r k s: 1) Data Warehouse provides the best support for analysis while OLAP carries out the task. ► Mandatory ► Whole ► Analysis (Page 69) ► Prediction
Question # 10 of 10 (Total M a r k s: 1) DOLAP allows download of "cube" structures to a desktop platform with the need for shared relational or cube server. ► True ► False (Page 78)
Question # 1 of 10 (Total M a r k s: 1) The STAR schema used for data design is a consisting of fact and dimension tables. Select correct option: Network model Relational model (Page 87) Hierarchical data model None of the given