

Spring 2008
BCIS 4660 Decision Support Systems
PRACTICE QUIZ FOR THE FINAL EXAMINATION
Answers Key included at the end

PART 1: Material covered during the FIRST PART of the semester

1. A(n) _____ holds information about the relationships among various entities.
 - a. data file
 - b. database
 - c. attribute
 - d. entity

2. Rows are also called _____.
 - a. fields
 - b. columns
 - c. tuples
 - d. attributes

3. In relational algebra, you can restrict the output from a join to include only certain columns by using the _____ command.
 - a. DELETE
 - b. UNION
 - c. PROJECT
 - d. INTERSECT

4. The basic form of an SQL retrieval command is _____.
 - a. SELECT-WHERE-FROM
 - b. CREATE-SELECT-FROM
 - c. SELECT-WHERE
 - d. SELECT-FROM-WHERE

Student (StudentID, FirstName, LastName, Street, City, State, Zip)

5. Based on the code above, change the Zip code of the student with ID 11433 to 14455.
 - a. UPDATE Student SET Zip='14455' ;
 - b. UPDATE Student SET Zip WHERE StudentID='11433' ;
 - c. UPDATE Student IN Zip='14455' WHERE StudentID='11433' ;
 - d. UPDATE Student SET Zip='14455' WHERE StudentID='11433' ;

6. Based on the code above, list the complete student table.
 - a. SELECT Student ;
 - b. SELECT & FROM Student ;
 - c. SELECT * FROM Student ;
 - d. SELECT LastName, FirstName, Street, City, State, Zip FROM Student

Customer (CustomerNum, CustomerName, Street, City, State, Zip, Balance, CreditLimit, RepNum)

7. Based on the code above, list the number, name, and available credit for all customers with credit limits that exceed their balances.
 - a. SELECT CustomerNum, CustomerName AS AvailableCredit FROM Customer WHERE CreditLimit>Balance ;
 - b. SELECT CustomerNum, CustomerName, CreditLimit AS AvailableCredit FROM Customer WHERE CreditLimit>Balance ;
 - c. SELECT CustomerNum, CustomerName, Balance AS AvailableCredit FROM Customer WHERE CreditLimit>Balance ;
 - d. SELECT CustomerNum, CustomerName, CreditLimit-Balance AS AvailableCredit FROM Customer WHERE CreditLimit>Balance ;

8. A table is in first normal form if _____.
a. it does not contain repeating groups
b. it does not contain a foreign key
c. it does not contain a primary key
d. it does not contain alternate keys
9. Partial dependencies are dependencies on only a portion of the _____.
a. nonkey column
b. first column or attribute
c. primary key
d. index
10. On an E-R diagram, the number closest to the rectangle represents _____ cardinality.
a. maximum
b. minimum
c. midvalue
d. smallest
11. Adding a new primary key which is not the same as the source system primary key to a dimension table is an effective way to address the problem known as _____.
a. Type 1 Change
b. Type 1 Error
c. Slowly changing dimensions
d. Frequently changing dimensions
12. Uncovering new knowledge, patterns, trends, and rules from the data stored in a data warehouse is known as _____.
a. fragmentation transparency
b. replication transparency
c. polymorphism
d. data mining
13. To create the dimensional model from the relatively well normalized transactional database, one must _____.
a. determine dimension and fact tables
b. denormalize the tables
c. rebuild the tables
d. all of the above

PART 2: Material covered during the SECOND PART of the semester

14. A drill-across report
a. Queries each fact table separately
b. Combines result sets from more than one fact table
c. Uses two or more queries with identical WHERE and GROUP BY clauses
d. All of the above
15. What are the guidelines for a Financial Reporting DW?
a. Its reports should be as reliable as the existing financial system
b. The sources for the Financial DW must be the approved, audited official systems
c. All changes and reversals in the financial system must be reflected in the financial DW
d. All of the above
16. Which financial reports can be supported by a financial reporting DW?
a. Balance Sheets, Income Statements, and Cash Flow Statements
b. Balance Sheets and Income Statements only
c. Income Statements only
d. Balance Sheets only

17. Which of the following is a reason for the growth in popularity of data mining?
- Increased volume of data
 - Increased awareness of the inadequacy of the human brain to process multi-factorial dependencies or correlations
 - Increased affordability of machine learning
 - All of the above
18. In _____, the multidimensional database server is replaced with a large relational database server. This “super” relational database will contain both detailed and summarized data thus allowing for “drill down” techniques to be applied to the data sets.
- OLAP
 - MOLAP
 - ROLAP
 - None of the above
19. Which data mining technique utilizes linkage analysis to search operational transactions for patterns with a high probability of repetition?
- Classification analysis
 - Association analysis
 - Sequencing
 - Principal components analysis
20. Low-level DW readiness for management sponsorship is identified by:
- Being able to access top executives
 - Their lack of understanding for what DW development entails
 - A firm using too many outside IS consultants
 - The DW team being formed without any IS participation
21. The amount of new data in the world in 2007 was approximately
- 5 Exabytes (Eb)
 - 281 Exabytes (Eb)
 - 5 Terabytes (Tb)
 - 200 Terabytes (Tb)
22. Some Data Warehousing trends include:
- Increasing costs for data storage
 - Decreasing computer performance
 - Need for increasing numbers of highly skilled analysts each year
 - Fairly stable volumes of data to analyze

KEY: 1-B, 2-C, 3-C, 4-D, 5-D, 6-C, 7-D, 8-A, 9-C, 10-A, 11-C, 12-D, 13-D, 14-D, 15-D, 16-A, 17-D, 18-C, 19-B, 20-B, 21-B, 22-C