Name:

HO CHI MINH CITY

UNIVERSITY OF TECHNOLOGY

Student ID:

Subject: Database Systems

Date: 17/05/2018 Paper code: 1091

Duration: 60 min Open book

Question 1: The ability to define common properties or functions in the higher class and then modify them in the lower classes is called:

- A. Polymorphism
- B. Inheritance
- C. Reflexive
- D. The ability to define common properties or functions in the higher class and then modify them in the lower classes is called:

Question 2: Database system modelers use this type of diagram to graphically represent both the data structure and how the different objects are interrelated.

- A. Object Diagram
- B. Data Diagram
- C. Class Diagram
- D. Database system modelers use this type of diagram to graphically represent both the data structure and how the different objects are interrelated.

Question 3: The primary difference between the Relational database (RDB) and Object Oriented database (OODB) models is:

- A. RDB allows the definition of the relationships between the different tables, while OODB does not allow the relationships to be defined between objects
- B. The primary difference between the Relational database (RDB) and Object Oriented database (OODB) models is:
- C. OODB supports multiple objects in the same database while RDB only supports a single table per database
- D. OODB incorporates methods in with the definition of the data structure, while RDB does not

Question 4: Which of the following items is not the advantage of a DBMS?

- A. Local control over the data
- B. Improved ability to enforce standards
- C. Improved data consistency
- D. Which of the following items is not the advantage of a DBMS?

Question 5: In the client / server model, the database:

A. is shared by both the client and server B. In the client / server model, the database:

C. is downloaded to the client upon request D. resides on the client side

Question 6: The database design that consists of multiple tables that are linked together through matching data stored in each table is called a:

- A. Network database
- B. Object oriented database
- C. The database design that consists of multiple tables that are linked together through matching data stored in each table is called a:
- D. Hierarchical database

- **Question 7:** In relational database model, after conceptually designing your database, the information contained in a single class would be stored in a:
 - A. In relational database model, after conceptually designing your database, the information contained in a single class would be stored in a:
 - B. database
 - C. field
 - D. property
- **Question 8:** Two different terms are used to describe the characteristics of interest for an entity. They are attributes and:
 - A. entities
 - B. classes
 - C. Two different terms are used to describe the characteristics of interest for an entity. They are attributes and:
 - D. properties

Question 9: The association role defines:

- A. the tables that each attribute is contained
- B. how tables are related in the database
- C. the relationship between the class diagram and the tables in the database
- D. The association role defines:
- Question 10: The predominant way of storing data today is using which type of database models?
 - A. Hierarchical
 - B. Object oriented
 - C. Network
 - D. The predominant way of storing data today is using which type of database models?
- **Question 11:** Business rules can be represented in the database through:
 - A. Business rules can be represented in the database through:
 - B. attributes
 - C. associations (or relationships)
 - D. secondary keys
- **Question 12:** An abstract data type is used to:
 - A. provide a conceptual view of the data so it is easier to understand
 - B. prevent users from getting to database security information
 - C. link data from remote databases
 - D. An abstract data type is used to:
- **Question 13:** Assume you are creating a database to handle the data associated with instruction at a university. What is the most appropriate special association to model that a course has an assigned instructor, Teaching Assistants, a classroom, meeting time slot, and class roster?
 - A. generalization association
 - B. composition association
 - C. Assume you are creating a database to handle the data associated with instruction at a university. What is the most appropriate special association to model that a course has an assigned instructor, Teaching Assistants, a classroom, meeting time slot, and class roster?
 - D. n-ary association

Question 14: The modern database report writer:

- A. provides the tools for database designer to display information in the desired format
- B. is a career path that focuses on creating, managing and supporting the reports generated from databases
- C. provide limited control over how information is displayed and reported
- D. The modern database report writer:
- **Question 15:** Assume you are creating a database to handle the data associated with instruction at a university. What is the most appropriate special association to model degree requirements (i.e., required number of courses in humanity, science, math, etc)?
 - A. n-ary association
 - B. Assume you are creating a database to handle the data associated with instruction at a university. What is the most appropriate special association to model degree requirements (i.e., required number of courses in humanity, science, math, etc)?
 - C. generalization association
 - D. composition association
- Question 16: When building a database, the data dealing with an entity is modeled as a:
 - A. object
 - B. attribute
 - C. When building a database, the data dealing with an entity is modeled as a:
 - D. class
- **Question 17:** Which component of the database management system (DBMS) most affects the ability to handle large problems (scalability)?
 - A. Which component of the database management system (DBMS) most affects the ability to handle large problems (scalability)?
 - B. Database Engine
 - C. Query Processor
 - D. Data Storage Subsystem
- **Question 18:** The traditional storage of data that is organized by customer, stored in separate folders in filing cabinets is an example of what type of 'database' system?
 - A. Network
 - B. Hierarchical
 - C. The traditional storage of data that is organized by customer, stored in separate folders in filing cabinets is an example of what type of 'database' system?
 - D. Object oriented
- **Question 19:** A reflexive association is drawn using which symbol:
 - A. a line which loops back onto the same table
 - B. A reflexive association is drawn using which symbol:
 - C. small closed diamond at the end of a line connecting two tables
 - D. small open diamond at the end of a line connecting two tables
- **Question 20:** A reflexive association is one where one class is:
 - A. linked back to itself
 - B. A reflexive association is one where one class is:
 - C. combined with multiple other classes
 - D. broken down into special cases
- Question 21: The separation of the data definition from the program is known as:
 - A. The separation of the data definition from the program is known as:

- B. data independence
- C. data dictionary
- D. data integrity

Question 22: What is the most appropriate special association that indicates that multiple textbooks make up a course required reading list?

- A. What is the most appropriate special association that indicates that multiple textbooks make up a course required reading list?
- B. aggregation association
- C. n-ary association
- D. generalization association

Question 23: What is the main limitation of Hierarchical Databases?

- A. Limited capacity (unable to hold much data)
- B. What is the main limitation of Hierarchical Databases?
- C. Overhead associated with maintaining indexes
- D. Limited flexibility in accessing data

Question 24: Software that defines a database, stores the data, supports a query language, produces reports and creates data entry screens is a:

- A. database management system (DBMS)
- B. Software that defines a database, stores the data, supports a query language, produces reports and creates data entry screens is a:
- C. data dictionary
- D. decision support system

Question 25: A composition association is drawn using which symbol:

- A. A line which loops back onto the same table
- B. Small open diamond at the end of a line connecting two tables
- C. A composition association is drawn using which symbol:
- D. Small closed diamond at the end of a line connecting two tables