

Grabcity Technical Paper 2004

(Technical- OOPS & DBMS)

1. Is it possible for a member function of a class to activate another member function of the same class?
 - a. no
 - b. yes, but only public member functions.
 - c. Yes, only private member functions
 - d. Yes, both public & private member functions can be activated

2. Can 2 classes contain member functions with the same name?
 - a. no
 - b. yes, but only if the 2 classes have the same name
 - c. yes, but only if the main program does not declare both kinds
 - d. yes, this is always allowed

3. what is the purpose of template functions?
 - a. to allow a single function to be used with varying types of arguments
 - b. to hide the same name of the function from the linker
 - c. to implement container classes
 - d. to permit the use of the debugger without the -gstabs flag

4. what kind of functions can access private member variables of a class
 - a. friend function of a class
 - b. private member functions of the class
 - c. public member functions of the class
 - e. all of the above
 - f. none

5. what technique is used to step thro' items of a container class?
 - a. copy constructor
 - b. default constructor
 - c. iterator (ans)

6. what is the term used to describe the situation when a derived class provides a function already provided in the base class ?
 - a. inheritning
 - b. overriding
 - c. abstraction
 - d. none

7. what r the characteristics of object, in general
 - a. it has name, properties
 - b. name, properties, behaviour
 - c. it can act on receiving a message
 - d. a &c
 - e. b&c

8. bundling data members together with the functions is called

- a. data hiding
- b. encapsulation (ans)
- c. data morphism
- d. data binding

9. why is OO programming useful?

- a. It supports good s/w engg. Practices
- b. It promotes thinking abt s/w in a way that models the way we think & interact naturally
- c. Supports code reuse
- d. A & b
- e. A, b & c

10. suppose tu want 2 develop 2 diff, + operators that calculate & return an object of the same class. Which stmt is correct?

- a. 1 operator must be a frnd & the other must not
- b. 1 operator must be public & the other private
- c. operators must have different parameter lists
- d. it is not possible 2 have 2 different + operators

11. what is inheritance?

- a. a relationship in which the structure & functionality of a class (“child”) is defined in terms of the structure & functionality of another (parent)
- b. a relationship in which the structure & functionality of a class (“parent”) is defined in terms of the structure & functionality of another (“child”)
- c. a relationship in which the structure & functionality of a class make calls 2 functionality of another
- d. a relationship in which the structure of a class includes 1 or more instances of another
- e. all of above

12. what is relationship betn . a class & its public parent class

- a. “.is a....”
- b. “has a”
- c. “is implemented as a
- d. uses a
- e. becomes a

13. how does inheritance relate 2 abstraction?

- A . a base class is an abstraction of all its derived classes
- b. a derived class is an abstraction of all its base classes
- d. Base & derived classes are abstractions for each other
- e. Inheritance prevents abstraction
- f. No relationship betn them

14. why can't compiler “hard-code” direct calls to virtual functions?

- a. b'coz hard –coding the fn. Call wud slow compilation of the program too much
- b. b'coz hard –coding the fn. Call wud slow execution of the program too much
- c. b'coz the correct fn. To call generally isn't know at compile –time
- d. b'coz virtual fns are always at compile-time so no run-time code is needed at all.

e. Compiler does hard-code direct calls 2 virtual functions.

15. what is accessibility of a protected member of a base class which is inherited privately?

a. private: b'coz the private inheritance makes everything from the base class private in the derived class
(ans)

DBMS

1. Indexing must be applied on fields that are

- a. seldom referenced in query
- b. containing few unique columns
- c. on frequently searched columns
- d. changed frequently

2. The relational data model includes several types of data integrity .which type of data integrity is ensured by the use of a primary key?

- a. entity integrity
- b. domain integrity
- c. referential integrity
- d. relational integrity

3. a student has 3 diff. Teachers . Each of these teachers has several students. Which type of relationship in relation model would effectively represent this?

- a. 3 one-to-many relationships
- b. two many-to-one relationships
- c. a single many-to-many relationship
- d. at least 2 many-to-many relationships

4. which of the following properties are required of a column or column sets for the column to function as a primary key?

- a. no nulls
- b. a clustered index
- c. a non-clustered index
- d. there must be at least 1 foreign key on the same table.

5. select a.pk, fn, b.zip, c.city from a, b, c where a.pk=b.pk

tables a,b,&c each contain 100 rows & the primary key for tables a & b is pk. What is the maximum No. of rows that could be returned by query

- a. 100
- b. 0
- c. 100,000
- d. 10,000
- e. 1,000,000

6. which of the following is only used with a foreign key constraint ?

- a. primary key constraint
- b. the references clause

c. a check constraint

7. which is used to return the no. of rows in a table?

- a. select all count from tablename
- b. select count(*) from tablename
- c. select numrows from table name

8. when writing sql queries , how do u control the query execution plan used by the databases

- a. query directly against an idex instead of table
- b. define a static cursor & specify the “using specific index’ keyword
- c. most databases provide propretitory methods to give database hint
- d. enclose quey in atransaction & add a statement using the “set search” keyword

9. Which is not allowed in a trigger

- a. update
- b. select into
- c. while
- d. begin

10. select type, avg(price), min(price) from product group by category

what is wrong??

- a. u can’t include multiple aggregates in a select list
- b. there is no where clause
- c. nothing