

**1.)What is the difference between a class and an instance of the class? -**

**A class describes a data type.**

An instance of a class is an object of the data type that exists in memory.

**3.)What is the default access specification of class members -**

Private

**5.)A contractor uses a blueprint to build a set of identical houses. Are classes analogous to the blueprint or the houses? -**

Blueprint -> Classes

Houses -> Objects

Classes are analogous to the blueprint where the objects created from the blueprints. The blueprint itself is a detailed description.

**7.)Is it a good idea to make member variables private? why or why not? -**

Yes, it protects variables from being directly manipulated by code outside of the class, and prevents them from receiving invalid data.

**9.)Under what circumstances should a member function be private? -**

When the function is needed for internal processing, but not useful to the program outside of the class.

**11.)What is a de-constructor? Is it possible to have more than one constructor?**

Destructor is a member function of the class that has same name of the class but preceded with a tilde (~) and is used to destroy the objects.

Yes, it's called Constructor Overloading.

**13.)If a class object is dynamically allocated in memory, does its constructor execute? If so, when? -**

Yes, executes when the object is created.

**15.)What are a class's responsibilities? -**

The class is responsible for knowing the action that the class is responsible for doing.

**17.)The two common programming methods in practice today are \_\_\_\_\_ and \_\_\_\_\_.**

Procedural Programming and Object-Oriented Programming

**19.) \_\_\_\_\_ programming is centered around objects. -**

Object-Oriented

**21.)In C++ the \_\_\_\_\_ is the construct primarily used to create objects. -**

Class

**23.)An \_\_\_\_\_ is a key word inside a class declaration that establishes a member's accessibility. -**

Access specifier

**25.)The default access specification of a struct in C++ is \_\_\_\_\_.**

Public

**27.)Members of a class object may be accessed through a pointer to the object by using the \_\_\_\_\_ operator. -**

->

**29.)If you were writing the external definitions of the Canine class's member functions, you would save them in a file named? \_\_\_\_\_ -**

Canine.cpp

**31.)A \_\_\_\_\_ is automatically called when an object is created. -**

Constructor

**33.) \_\_\_\_\_ are useful for performing initialization or setup routines in a class object. -**

Constructors

**35.)A \_\_\_\_\_ constructor is one that requires no arguments. -**

Default

**37.)A destructor has the same name as the class, but is preceded by a \_\_\_\_\_ character. -**

tilde (~)

**39.)A constructor whose arguments all have default values is a \_\_\_\_\_ constructor. -**

Default

41.)A class may only have one default \_\_\_\_\_ and one \_\_\_\_\_ -  
Constructor and one Destructor

51.)Private members must be declared before public members. -  
F

52.)Class members are private by default. -  
T

53.)Member of a struct are private by default -  
F

54.)Classes and structures in C++ are very similar -  
T

55.)All private members of a class must be declared together. -  
F

56.)All public members of a class must be declared together. -  
F

57.)It is legal to define a pointer to a class object. -  
T

58.)You can use the new operator to dynamically allocate an instance of a class. -  
T

59.)A private member function may be called from a statement outside the class, as long as the statement is in the same program as the class declaration. -  
F

60.)Constructors do not have to have the same name as the class -  
F

61.)Constructors may not have a return type. -  
T

62.)Constructors cannot take arguments. -  
F

63.)Destructors cannot take arguments. -

T

64.)Destructors may return a value. -

F

65.)Constructors may have default arguments. -

T

66.)Member functions may be overloaded. -

T

67.)Constructors may not be overloaded. -

F

68.)A class may not have a constructor with no parameter list, and a constructor whose arguments all have default values. -

F

69.)A class may only have on destructor. -

T

70.)When an array of objects is defined, the constructor is only called for the first element. -

F

71.)To find the classes needed for an object-oriented application, you identify all of the verbs in a description of the problem domain. -

F

72.)A class's responsibilities are the things the class is responsible for knowing, and actions the class must perform. -

T