OOP Course Using C++

Practice Test 3

Student ID:

1) One of the following is NOT TRUE about Object-Oriented Paradigms (OOPs):

A) OOP is a set of techniques and processes focusing on how to analyse and model a real world problem and to design a solution.

B) The intended benefits of OOP are to solve the "software" crisis, break complexity into small manageable chunks, and make software maintenance easier.

C) OOP allows reuse of components – plug and play

D) OOP solves the entire problem in one program.

2) Which point is FALSE from the following?

A) A class is an object

B) A class is a template or prototype that defines the composition and the behavior of all objects of certain kinds.

C) A class may have fields of composite types

D) From a class you may initiate an object

4) A method in a class that is used to change the values of some fields in that class is called:

A) A constructor

B) An accessor method → "getter"

C) A mutator method → "setter"

D) None of the above

5) If there are one or more constructors for a class then

A) Exactly one of the constructors will be called each time an object of that class is created

B) All of the constructors will be called each time an object of that class is created

C) A destructor must also be written.

D) None of the above, classes cannot have constructors

6) A method that is called automatically each time an object is created is a

a) constructor

b) accessor function

c) mutator method

d) None of the above

7) Which of the following is not one of the major support of object-oriented programming?

a) Encapsulation

b) Data Hiding

c) Inheritance

d) Structured Programming

8) Encapsulation provides

a) inheritance

b) information hiding

c) polymorphism

d) none of the above

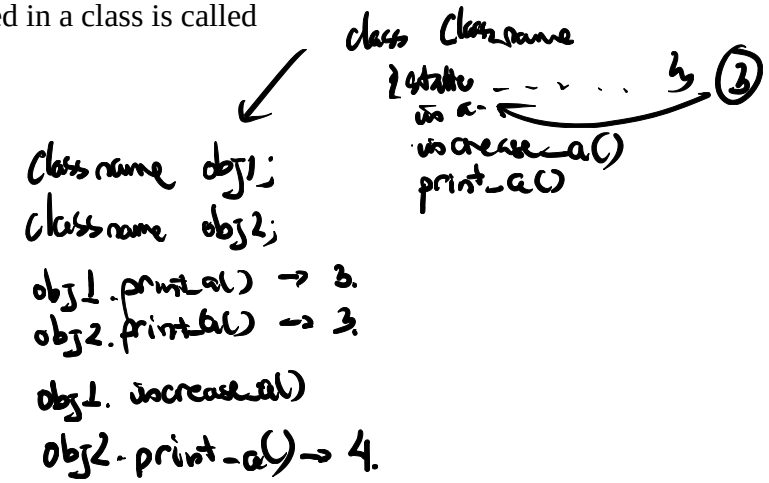
9) The static variable declared in a class is called

a) Global variable

b) Local Variable

c) Class variable

d) Instance variable



10) A hospital wants to create a database regarding its indoor patients. The information to store include

- Name of the patient
- Age of the patient
- Disease
- Date of admission
- Date of discharge

Create a class called Patient to store the above information. The member methods should include methods to enter information and display the patient's information. Create class Date to have the date (year, month and day as its fields) and a method to display the date

Create class Hospital to have an array list to store all patients. It has methods to add a patient to the list and to delete a patient from the list. It also has a method to display a list of all the patients in the hospital and a method to display only the patients whose age is less than 12

11) Consider the following class hierarchy where Class Car is the supper class and the classes ClassicCar and SportCar are two subclasses derived from Car. Class CarExhibition contains a field of type ArrayList that stores objects of type Car.