Oops (object oriented program).

Assignment**.**

**1) what is class in object oriented programming language?**

**Ans) class: class is the collection of object.**

**Class is the collection of data member(variable) and member function(process, method) with its behavior.**

**2) what is object in object oriented programming language?**

**Ans) object: to instance the class.**

**Collection of class.**

**To access all the properties of class except private.**

**3) what is the difference between class and interface?**

|  |  |
| --- | --- |
| * *class* | * *interface.* |
| Class can instantiate variable &create object. | Interface can’t instantiate variable & create object. |
| class can contain concreate method. | The interface can’t contain concreate method. |
| The access specifiers used with classes are private protected and public. | In interface only public specifier is used. |

**4) what is method overloading in object oriented programming language ?**

**Ans) method overloading is a form of polymorphism in opps.**

**Compile time is also known as method overloading.**

**5) what is data hiding in object oriented programming language?**

**Ans) data hiding in opps used to hide data.**

**Private your data member and member function.**

**Data hiding is a form of encapsulation.**

**6) what are difference between abstract classes and interface ?**

**Ans)**

|  |  |
| --- | --- |
| ***Abstract classes.*** | ***Interfaces.*** |
| **Abstract classes are fast.** | **Interfaces are slow.** |
| **Abstract classes can extend only one class.** | **Interfaces can implement several interface.** |
| **A single abstract class can extend one &only one interface.** | **A single interface can extend multiple interface.** |

**7) what are the virtual function in object oriented programming language?**

**Ans) a virtual function is a member function that you expect to be redefined in derived classes.**

**8) what is the constructor in object oriented programming language?**

**Ans) In opps a constructor is special type of subroutine to create and object.**

**9) what is abstract class in object oriented programming language?**

**Ans) An abstract class is a class that contain at least one abstract method.**

**Method that declared ,but not implemented in code.**

**10)what is the final key word in object oriented programming language?**

**Ans) The final keyword is non-access modifier used for classes , attributes and method, which make them non-changeable .ex. value of PI=3.14.**

**11) WHAT is pure virtual function in object oriented programming language?**

**Ans) A pure virtual function that is required to be implemented by a derived class if the derived class is not abstract.**

**12)what is sealed modifiers in object oriented programming language?**

**Ans) the sealed modifier prevent other classes from inheriting from it.**

**13) what is dynamic and runtime polymorphism in object oriented programming language?**

**Ans) dynamic and runtime method is a process that resolve a call to an overridden method at runtime.**

**14) what is access modifier in object oriented programming language?**

**Ans) access modifier are keywords that used in opp in order to specify the accessibility of the method, classes, constructor, and other member of class.**

**15) what is friend function in object oriented programming language?**

**Ans) A function that is given same access as method to private and protected data.**

**16) what is overriding in object oriented programming language?**

**Ans) overriding is a form of polymorphism.**

**Runtime is also known as overriding.**

**17) what is the role of mutable storage class specifier?**

**Ans) to make it modifiable even thought the member is part of an object declared as constant.**