**Python OOP Assignment**

Q1. What is the purpose of Python's OOP?

ANSWER:-the purpose of opps is provides a means of structuring programs so that properties and behaviors are bundled into individual objects.

Q2. Where does an inheritance search look for an attribute?

ANSWER:-an attribute does The whole point of a namespace tool like the class statement is to support name inheritance

Q3 How do you distinguish between a class object and an instance object?

ANSWER:- the terms 'object' and 'instance' are interchangeable, the term 'instance' refers to an object's relationship to its class.

Q4. what makes the first argument in a class method function special?

ANSWER:- This is the reason the first parameter of a function in class must be the object itself.

Q5. What is the purpose of the init method?

ANSWER:- . The \_\_init\_\_ method lets the class initialize the object's attributes and serves no other purpose

Q6. What is the process for creating a class instance?

ANSWER:- create instances of a class, you call the class using class name and pass in whatever arguments its \_\_init\_\_ method accepts.

Q7. What is the process for creating a class?

ANSWER:-the processing forcreate a class

* Tap Classroom .
* Tap Add. ...
* Enter the class name.
* (Optional) To enter a short description, grade level, or class time, tap Section and enter the details.
* (Optional) To enter the location for the class, tap Room and enter the details.
* (Optional) To add a subject, tap Subject and enter a name.
* Tap Create.

Q8. How would you define the superclasses of a ?

ANSWER:- The class from which a class inherits is called the parent or superclass. A class which inherits from a superclass is called a subclass, also called heir class or child class.

Q9 What is the relationship between classes and modules?

ANSWER:- a module in python is simply a way to organize the code, and it contains either python classes or just functions

Q10. How do you make instances and classes?

ANSWER:-an intances and classes classcall the class using class name and pass in whatever arguments its \_\_init\_\_ method accepts.

Q11. Where and how should be class attributes created?

ANSWER:-class attribute should be created for object of a class or attributes that will be unique to each object of the class.

Example: class Student:

name = "Jane"

course = "JavaScript"

Q12. Where and how are instance attributes created?

ANSWER:- Instance attributes are defined in the constructor. Defined directly inside a class.

Q13. What does the term "self" in a Python class mean?

ANSWER:- The self parameter is a reference to the current instance of the class, and is used to access variables that belongs to the class.

Q14. How does a Python class handle operator overloading?

ANSWER:- The operator overloading in Python means provide extended meaning beyond their predefined operational meaning.”int”,”str”,”+”.

Q15. When do you consider allowing operator overloading of your classes?

ANSWER:- Operator overloading is mostly useful when you're making a new class that falls into an existing "Abstract Base Class" (ABC).

Q16. What is the most popular form of operator overloading?

ANSWER:- The most frequent instance is the adding up operator ‘+’, where it can be used for the usual addition and also for combining two different strings. As mentioned on top, the plus symbol’s practice in dissimilar forms is the largest classic example of the operator level overloading process.

Q17. What are the two most important concepts to grasp in order to comprehend Python OOP code?

ANSWER:-the rwo most important concepts to grasp in order to comprehend in opps code are inheritance and polymorphism.

Q18. Describe three applications for exception processing.

ANSWER:- Program use exception handling mechanism to handle the runtime errors so that flow of the application can be maintained

Q19. What happens if you don't do something extra to treat an exception?

ANSWER:- If we don’t do do something extra to treat an exceptation will happen the program terminates abruptly and the code past the line that caused the exception will not get executed.

Q20. What are your options for recovering from an exception in your script?

ANSWER:-

Q21. Describe two methods for triggering exceptions in your script.

ANSWER:-the two method for triggering expectation is

Try – This method catches the exceptions raised by the program.

Raise – Triggers an exception manually using custom exceptions.

Q22. Identify two methods for specifying actions to be executed at termination time, regardless of  
whether or not an exception exists.

ANSWER:-

Q23. What is the purpose of the try statement?

ANSWER:- The try statement allows you to define a block of code to be tested for errors while it is being executed

Q24. What are the two most popular try statement variations?

ANSWER:-The two most popular try statement variations is else and finally .

Q25. What is the purpose of the raise statement?

ANSWER:- The purpose of RAISE statement stops normal execution of a PL/SQL block or subprogram and transfers control to an exception handler

Q26. What does the assert statement do, and what other statement is it like?

ANSWER:- The assert keyword lets you test if a condition in your code returns True, if not, the program will raise an AssertionError.

Q27. What is the purpose of the with/as argument, and what other statement is it like?

Answer:- the purpose of the with/as argument, and what other statement is it like is replaces a try-catch block with a concise shorthand.

Q28. What are \*args, \*\*kwargs?

ANSWER:- \*args specifies the number of non-keyworded arguments that can be passed and the operations that can be performed on the function in Python whereas \*\*kwargs is a variable number of keyworded arguments that can be passed to a function that can perform dictionary operations.

Q29. How can I pass optional or keyword parameters from one function to another?

ANSWER:- To pass optional or keyword parameters from one function to another, collect the arguments using the \* and \*\* specifiers in the function’s parameter list But, at first, do know what are \*args and \*\*args in Python. Let us understand them.

Q30. What are Lambda Functions?

ANSWER:- A lambda function is a small anonymous function. lambda function can take any number of arguments, but can only have one expression.

Q31. Explain Inheritance in Python with an example?

ANSWER:- Inheritance is defines the classes that inherit from other classes as derived, subclass, or sub-type classes.example=”dhvani”

Q32. Suppose class C inherits from classes A and B as class C(A,B).Classes A and B both have their own versions of method func(). If we call func() from an object of class C, which version gets invoked?

ANSWER:-

Q33. Which methods/functions do we use to determine the type of instance and inheritance?

ANSWER:- the isinstance() method checks whether an object is an instance of a class whereas , issubclass() method asks whether one class is a subclass of another class (or other classes).

Q34.Explain the use of the 'nonlocal' keyword in Python.

ANSWER:- The nonlocal keyword is used to work with variables inside nested functions, where the variable should not belong to the inner function.

Q35. What is the global keyword?

ANSWER:- The global keyword is used to create global variables from a no-global scope, example: inside a function.