**Design Pattern Quiz :**

**Q1. A Design pattern is:**

1. an algorithm used in object-oriented programming
2. a data structure used in object-oriented programming
3. a solution to a common problem in object-oriented programming
4. a blueprint for a particular kind of class

**Q2.Which of the following is correct about Behavioral design patterns.**

1. These design patterns are specifically concerned with communication between objects.
2. [These design patterns provide a way to create objects while hiding the creation logic, rather than instantiating objects directly using new opreator.](javascript:void(0);)
3. [These design patterns concern class and object composition. Concept of inheritance is used to compose interfaces and define ways to compose objects to obtain new functionalities.](javascript:void(0);)
4. [None of the above.](javascript:void(0);)

**Q 3 - Which of the following pattern is used when creation of object directly is costly?**

A - Bridge Pattern

B - Adapter Pattern

C - Prototype Pattern

D - Filter Pattern

**Q 4 - Which of the following describes the Singleton pattern correctly?**

A - This pattern creates object without exposing the creation logic to the client and refer to newly created object using a common interface.

B - In this pattern an interface is responsible for creating a factory of related objects without explicitly specifying their classes.

C - This pattern involves a single class which is responsible to create an object while making sure that only single object gets created.

D - This pattern is used when we want to pass data with multiple attributes in one shot from client to server.

**Q5. Which of the following is not one of the elements of a design pattern?**

1. context
2. environment
3. problem
4. solution

**Q6. an interface for creating an object, but let the subclasses decide which class to instantiate. It let the instantiation differ to subclasses.**

1. Factory Method
2. Abstract Factory
3. Builder
4. Prototype

**Q7. Attach additional responsibilities to an object dynamically. It provides a flexible alternative to subclassing for extending functionality.**

1. Chain of responsibility
2. Adapter
3. Decorator
4. Composite

**Q8. Ensure a class has only one instance, and provide a global access point to it.**

1. Single Class Factory
2. Proxy
3. Singleton
4. Flyweight

**Q9. Which of the following is correct about the Singleton design pattern.**

1. This type of design pattern comes under creational pattern.
2. This pattern involves a single class which is responsible to create an object while making sure that only single object gets created.
3. Singleton class provides a way to access its only object which can be accessed directly without need to instantiate the object of the class
4. All of the above.

**Q10. Design pattern is to program as:**

1. Metal is to car
2. Park is to tree
3. Blueprint is to building
4. Mountain Dew is to soda

**Answers**

Q1. C

Q2 . A

Q3. A

Q4. C

Q5. A

Q6. A

Q7. C

Q8. C

Q9. D

Q10. C