This section presents you various set of Mock Tests related to **Design Patterns Framework**. You can download these sample mock tests at your local machine and solve offline at your convenience. Every mock test is supplied with a mock test key to let you verify the final score and grade yourself.

### DESIGN PATTERNS MOCK TEST I

**Q 1 - Which of the following is true about design patterns?**

A - Design patterns represent the best practices used by experienced object-oriented software developers.

B - Design patterns are solutions to general problems that software developers faced during software development.

C - Design patterns are obtained by trial and error by numerous software developers over quite a substantial period of time.

D - All of the above.

**Q 2 - What is Gang of Four GOF?**

A - Four authors of Book 'Design Patterns - Elements of Reusable Object-Oriented Software' are known as Gang of Four GOF.

B - Gang of Four GOF is a name of a book on Design Patterns.

C - Gang of Four GOF is a Design Pattern.

D - None of the above.

**Q 3 - Which of the following is correct list of classifications of design patterns.**

A - Creational, Structural and Behavioral patterns.

B - Executional, Structural and Behavioral patterns.

C - Creational, Executional and Behavioral patterns.

D - None of the above.
Q 4 - Which of the following is correct about Creational design patterns.
A - These design patterns are specifically concerned with communication between objects.
B - These design patterns provide a way to create objects while hiding the creation logic, rather than instantiating objects directly using new operator.
C - 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.
D - None of the above.

Q 5 - Which of the following is correct about Structural design patterns.
A - These design patterns are specifically concerned with communication between objects.
B - These design patterns provide a way to create objects while hiding the creation logic, rather than instantiating objects directly using new operator.
C - 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.
D - None of the above.

Q 6 - Which of the following is correct about Behavioral design patterns.
A - These design patterns are specifically concerned with communication between objects.
B - These design patterns provide a way to create objects while hiding the creation logic, rather than instantiating objects directly using new operator.
C - 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.
D - None of the above.

Q 7 - Which of the following is correct about Factory design pattern.
A - This type of design pattern comes under creational pattern.
B - Factory pattern creates object without exposing the creation logic to the client.
C - Factory pattern refers to newly created object using a common interface.
D - All of the above.

Q 8 - Which of the following is correct about Abstract Factory design pattern.
A - This type of design pattern comes under creational pattern.
B - Abstract Factory patterns work around a super-factory which creates other factories.
C - In Abstract Factory pattern an interface is responsible for creating a factory of related objects without explicitly specifying their classes.
D - All of the above.

Q 9 - Which of the following is correct about Singleton design pattern.
**A** - This type of design pattern comes under creational pattern.

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

**C** - Singleton class provides a way to access its only object which can be accessed directly without need to instantiate the object of the class.

**D** - All of the above.

**Q 10 - Can we create a clone of a singleton object?**

- A - true
- B - false

**Q 11 - If we serialize a singleton object and deserialize it then the result object will be same.**

- A - true
- B - false

**Q 12 - Integer class is an example of Decorator pattern.**

- A - true
- B - false

**Q 13 - Runtime class is an example of singleton.**

- A - true
- B - false

**Q 14 - Integer.valueOf is an example of Factory pattern.**

- A - false
- B - true

**Q 15 - Event handling frameworks like swing, awt use Observer Pattern.**

- A - false
- B - true

**Q 16 - Which of the following describes the Builder pattern correctly?**

- A - This pattern builds a complex object using simple objects and using a step by step approach.
- B - This pattern refers to creating duplicate object while keeping performance in mind.
- C - This pattern is used when creation of object directly is costly.
- This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

**Q 17 - Which of the following describes the Bridge pattern correctly?**

A - This pattern builds a complex object using simple objects and using a step by step approach.
B - This pattern refers to creating duplicate object while keeping performance in mind.
C - This pattern is used when creation of object directly is costly.
D - This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

**Q 18 - Which of the following describes the Prototype pattern correctly?**

A - This pattern builds a complex object using simple objects and using a step by step approach.
B - This pattern refers to creating duplicate object while keeping performance in mind.
C - This pattern works as a bridge between two incompatible interfaces.
D - This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

**Q 19 - Which of the following describes the Adapter pattern correctly?**

A - This pattern builds a complex object using simple objects and using a step by step approach.
B - This pattern refers to creating duplicate object while keeping performance in mind.
C - This pattern works as a bridge between two incompatible interfaces.
D - This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

**Q 20 - Which of the following describes the Filter pattern correctly?**

A - This pattern builds a complex object using simple objects and using a step by step approach.
B - This pattern refers to creating duplicate object while keeping performance in mind.
C - This pattern enables developers to filter a set of objects using different criteria and chaining them in a decoupled way through logical operations.
D - This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

**Q 21 - Which of the following pattern builds a complex object using simple objects and using a step by step approach?**

A - Builder Pattern
B - Bridge Pattern
C - Adapter Pattern
D - Filter Pattern
Q 22 - Which of the following pattern refers to creating duplicate object while keeping performance in mind?
A - Builder Pattern
B - Bridge Pattern
C - Prototype Pattern
D - Filter Pattern

Q 23 - Which of the following pattern works as a bridge between two incompatible interfaces?
A - Builder Pattern
B - Adapter Pattern
C - Prototype Pattern
D - Filter Pattern

Q 24 - Which of the following pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently?
A - Bridge Pattern
B - Adapter Pattern
C - Prototype Pattern
D - Filter Pattern

Q 25 - 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

ANSWER SHEET

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