**Creational patterns: definitions, problem and solution statements**

**Test:**

**1. What is the best definition of Creational patterns?**

A. This type of patterns provides a way to create interfaces and define ways to compose objects to obtain new functionalities.

B. This type of patterns provides an ability to hide creation logic instead of using new operator.

C. This type of patterns is specifically concerned with communication between objects.

D. This type of patterns is specifically concerned with the presentation tier.

**2. What is related to Creational patterns? Multiple options available.**

A. Creational patterns are concerned with how objects and classes communicate with each other.

B. Creational patterns hide how instances of classes are created and put together.

C. Creational patterns describe ways to compose objects to realize new functionality.

D. Creational patterns show ways how classes and objects are composed to form larger structures.

E. Creational patterns encapsulate knowledge about which concrete classes the system uses.

**3. What from the following code issues can be solved with Creational Patterns? Multiple answers possible.**

A. Algorithm implementation contains too many special case logic and conditional statements.

B. Different methods in subclass do semantically similar steps except for creating objects.

C. Creation code is duplicated in different methods.

D. Class has new responsibility which is additional to its base responsibility which makes the class very big.

E. Creation logic is sprawled among many classes.

F. Classes implement the same of similar steps and have different interface which make client code complicated, since it has to work with both interfaces.

**4. Which of the following pattern creates object without exposing the creation logic to the client and refer to newly created object using a common interface?**

A. Factory Pattern.

B. Abstract Factory Pattern.

C. Singleton Pattern.

D. Prototype Pattern.

**5. Which of the following describes the Abstract Factory 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.

**6. Which Design Pattern should you use when a class wants its subclasses to specify the objects it creates?**

A. Abstract Factory.

B. Builder.

C. Factory Method.

D. Singleton.

**7. Which Design Pattern should you use when there must be exactly one instance of a class, and it must be accessible to clients from a well-known access point.**

A. Abstract Factory.

B. Builder.

C. Factory Method.

D. Singleton.

**8.** **Which Design Pattern should you use when a system should be configured with one of multiple families of products.**

A. Builder.

B. Abstract Factory.

C. Factory Method.

D. Singleton.