1. Purpose of rt.jar file-

rt. jar stands for runtime and contains all of the compiled class files for the core Java Runtime environment. If jar file is not in class path, we can't able to access the core classes e.g. java. lang.

2. Purpose of index and type in constructor argument-

As well as solving the ambiguity problem of multiple simple values, specifying an index also solves the problem of ambiguity where a constructor may have two arguments of the same type.

Using type matching instead of index matching in a Spring constructor-arg element produces a more readable bean definition and is less vulnerable to being broken by a change to the constructor of the bean's underlying class.

3. Purpose of Scope name()-

Specifies the name of the scope to use for the annotated component/bean. Defaults to an empty string ("") which implies [SCOPE\_SINGLETON](https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/beans/factory/config/ConfigurableBeanFactory.html#SCOPE_SINGLETON).

4. Use of annotation config-

<context:annotation-config> is used to activate annotations in beans already registered in the application context (no matter if they were defined with XML or by package scanning).

5. Use of application context-

ApplicationContext is an interface for providing configuration information to an application. There are multiple classes provided by springframework that implements this interface and helps us use configuration information in applications. ApplicationContext provides standard bean factory lifecycle capabilities.