

Unit 5

Q. No.	Question/Answer	Marks
1.	What is List?	1
Ans:	List is an ordered collection.	
2.	What is the limitation of generic in java?	1
Ans	During runtime, we have only class, at the end of compilation all the types are replaced by object type.	
3.	What is callback?	1
Ans:	It's a piece of code that passes as an argument to be executed on some other code. Basically holds reference to some state to which it actually becomes useful.	
4.	What is Boxing and unboxing?	2
Ans:	Boxing-Conversion of value pf primitive type to an object reference. Unboxing- Conversion from Object type to primitive type.	
5.	What is the difference between static and dynamic array?	2
Ans:	In static array size is fixed and cannot add element in between, where as in dynamic array element can be inserted in between and also remove.	
6.	List different types of Inner class.	2
Ans:	i)Non-static Inner class ii) Static Inner class iii) Local Inner class iv) Anonymous Inner class	
7.	If the compiler erases all type parameters at compile time, why should you use generics?	3
Ans:	Should use generics because: <ul style="list-style-type: none"> • The Java compiler enforces tighter type checks on generic code at compile time. • Generics support programming types as parameters. • Generics enable you to implement generic algorithms. 	
8.	What are the advantage of Collections?	4

Ans:	1. Reduces Programming effort. 2. Increases program speed and quality. 3. Reduces effort to learn & use new API. 4. Reduces effort to design new APIs.	
9.	<p>Given program:</p> <pre>public class Example { String s; static class Inner { void testMethod() { s = "Java Programming"; } } }</pre> <p>The above program doesn't compile. What do you need to do to make it compile? Why? Write the corrected code.</p>	4
Ans:	<p>Delete static in front of the declaration of the Inner class. An static inner class does not have access to the instance fields of the outer class.</p> <p>Corrected code:</p> <pre>public class Example { String s; class Inner { void testMethod() { s = "Java Programming"; } } }</pre>	
10.	What is serialization explain with an example program.	6
Ans:	<p>It is the process of translating the object state into a format that can be stored ie. In a file or a memory data buffer. So, we will store the objects into a file and bring them back later. This serialization of objects requires that we implement the marker interface called Serializable. Similarly, in the case of Cloneable interface, JVM will take care of all the operations and have to include to indicate that we want this service.</p> <p>Program:</p> <pre>import java.io.*; public class Example6{ public static void main(String[] args) throws Exception{ Sample s=new Sample(); s.i=99; System.out.println(s.i); File f=new File("input2.txt"); FileOutputStream fo=new FileOutputStream(f); ObjectOutputStream oo=new ObjectOutputStream(fo);</pre>	

	<pre>oo.writeObject(s); } } class Sample implements Serializable //marker interface { int i; }</pre>	
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