**Chapter 1:**

**Q1. What extensions are used for Java source and compiled files?**

**Ans.** .class for complied java source code file.

.java for source file.

**Q2. Describe the three kinds of comments used in Java programs.**

**Ans.**

1. Single line comments
2. Multi-line comments
3. Javadoc comments

**Q3. What are the eight primitive types in Java?**

**Ans.** Primitives in java are byte, int, long, short, Boolean, float, char and double.

**Q4. What is the difference between the \* and \*= operators?**

**Ans.** \* means multiplication. For example: 5 \* 5.

\*= means the multiplication of the left value to right. For example x \*= y

It means x = x\*y.

**Q5. Explain the difference between the prefix and postfix increment operators.**

**Ans.**

**Chapter 2:**

**Q1. List the major differences between reference types and primitive types.**

**Ans.**

**Q2. List five operations that can be applied to a reference type.**

**Ans.**

**Q3. What are the differences between an array and ArrayList?**

**Ans.**

**Q4. Describe how exceptions work in Java.**

**public static void foo( )**

**{**

**try**

**{**

**return 0;**

**}**

**finally**

**{**

**return 1;**

**}**

**}**

**public static void bar( )**

**{**

**try**

**{**

**throw new NullPointerException( );**

**}**

**finally**

**{**

**throw new ArithmeticException( );**

**}**

**Ans.**

**2.5 List the basic operations that can be performed on Strings.**

**Ans.**

**Chapter 3:**

**Q1. What is information hiding? What is encapsulation? How does Java support these concepts?**

**Ans.**

**Q2. Explain the public and private sections of the class.**

**Ans.**

**Q3. Describe the role of the constructor.**

**Ans.**

**Q4. If a class provides no constructor, what is the result?**

**Ans.**

**Q5. Explain the uses of this in Java.**

**Ans.**

**Chapter 4:**

**4.1 What members of an inherited class can be used in the derived class? What members become public for users of the derived class?**

**Ans.**

**4.2 What is composition?**

**Ans.**

**4.3 Explain polymorphism. Explain dynamic dispatch. When is dynamic dispatch not used?**

**Ans.**

**4.4 What is autoboxing and unboxing?**

**Ans.**

**4.5 What is a final method?**

**Ans.**