1. Fill in the blanks in each of the following sentences about the Java environment:

a. The java command from the JDK executes a Java application.

b. The javac command from the JDK compiles a Java program.

c. A Java program file must end with the java file extension.

d. When a Java program is compiled, the file produced by the compiler ends with the class file

extension.

e. The file produced by the Java compiler contains byte codes that are executed by the Java Virtual

Machine.

 2. What is the task of the compiler in programming languages?

CONVERT THE HUMAN READABLE LANGUAGE TO TARGET CODE.

3. What is the difference between C and Java languages?

C	JAVA
C converts code into machine readable code directly	Java converts to byte code and next step is done by jvm is convert it to machine code
C suppors pointers	Java does not supports pointers
C is platform dependent	Java is a platform independent
C supports Preproccessors	Java doesn't support Preprocessors
C doesn't supports OOPS concept	Java supports OOPS concept
It has 32 Keywords	It has 50 Keywords

4. If we compile a Java program in the Windows environment, can we run that program in any other operating system? Explain your answer briefly.

Yes, Because the file is read by the JVM which installed on the operating System.

5. What is the difference between Java interpreter (in JVM) and O/S interpreter (Command Interpreter)?

Java interpriter converts the byte codes into Machine Readable Code and the Command Interpriter reads the machine readable codes.

6. What is the meaning of "Compile" in Java language? And why is that necessary?

Converting Source Codes to byte code is called by 'compile' in java language.When we type codes using human readable language the jvm cannot understand the commands and data. therefor we have to convert them to java readable language.the java compiler helps us to convert it.

7. What are the steps needed to create and run a Java program in a Linux environment?

1. Type java program using Word processing software

2. Save it with .java extention

3. Compile it with javac command

4. Run it with java command

8. Akila creates a Java program in his HP laptop machine. He gave the compiled code (Class File) to Manoj to run that program in his computer. But Manoj's laptop brand is Dell. When Manoj tries to run the program, it didn't work. What can be the reason for that?

There will be syntax errors.

9. Explain the command "java Example" that we write in Terminal.

The O/S cannot run directly the byte code which is created by java compiler.We have to use the Java interpriter(JVM) to Convert the byte code to Machine Readable code.When we type java command on terminal the byte code is converted to Machie readable code by the JVM.

The 'Example' is the byte code file which is compiled by the java compiler

10. Which of the following main method declarations are valid (Runs without errors) ?

A. public static void main(String args[]){ }

B. public void main(String args[]){}

C. static void main(String args[]){}

D. public static void main(String args){ }

E. void main(String args[]){ }

F. public static void main(){ }

G. static public void main(String args[]){ }

H. void main(String args){ }

I. public static main(String args){ }

J. public static void main(String []){ }

K. static void public main(String args){ }