**Section: Java History**

**Questions & Answers:**

**Q1) Why Java is developed?**

**A:** Java is a programming language that was mainly designed to develop internet applications by providing platform independency.

**Q2) When should we use C language & when should we use Java language?**

**A:** If you want to develop system applications such as device driver software, you can use C language but if you want to develop internet applications then go with Java.

**Q3) What are the important features of Java?**

**A:** Simple, Object-oriented, Secure, Multithreaded, Robust, High performance, Portable, Distributed, Architecture Neutral, Dynamic

**Q4) What is OAK?**

**A:** Oak is a discontinued programming language created by James Gosling in 1991, initially for Sun Microsystems' set-top box project. The language later evolved to become Java.

**Q5) What is the abbreviation of Java?**

**A:** There is no abbreviation of Java.

**Q6) What is a platform, Platform Dependency and Platform Independency?**

**A:** Platform: An environment which contains hardware or software components and which helps in running applications. Example: Operating System (OS) --> Windows

Platform Dependency: When applications are unable to execute on other OS than the one in which it was compiled. Example: C, C++ has platform dependency.

Platform Independency: When applications can be executed from any OS no matter in which OS it was compiled. Example: Java has platform independency.

**Q7) What is the meaning of**

**a. source code, compiled code, executable code**

**b. compilation, execution**

**c. compiler & interpreter**

**A: a. source code:** Programmer written code**, compiled code:** Code we get after compiling source code**, executable code:** Code that can be executed (.exe) file

**b. compilation:** Process of converting source code into compiled code (bytecode, in case of Java)**, execution:** Process of executing a compiled code

**c. compiler:** a translation program that converts source code to compiled code(bytecode in case of Java) at a time**, interpreter:** a translation program that converts sourcecode into machine language line by line. (But in Java, interpreter converts bytecode produced by compiler into machine understandable code)**.**

**Q8) Why C, C++ programming languages have platform dependency?**

**A:** C, C++ programming languages have platform dependency because their source code is converted into machine language during compilation phase itself.

**Q9) How Java achieved Platform Independency?**

**A:** Java achieved platform independency by moving generation of machine language code from compilation phase to execution phase.

**Q10) Why JVM is platform dependent?**

**A:** JVM is platform dependent because it converts bytecode into machine understandable code only for the current operating system. Hence, we require different JVMs for different OS.

**Q11) What is the Java's slogan?**

**A:** Write Once Run Anywhere (WORA)

**Q12) Explain why Java is called language, platform, & technology?**

**A:** Java is called a language because we can develop internet applications using Java.

Java is called a platform because it also contains JRE (Java Runtime Environment) which helps in executing java applications on top of existing OS. It provides a software based platform.

Java is called a technology because itcontains API and usable applications that helps in developing other useful applications.