Object Oriented Programming Language

Q1) Multiple Choice Questions(5x1=5)

I)The Java bytecode is executed by

a) Java Run Time Environment (JRE) b) Java Development Kit (JDK) c) Just in Time Compiler (JIT) d) Java Virtual Machine(JVM)

II) Which of the following is a type of polymorphism in Java Programming

a) Multiple Polymorphism b) Compile time polymorphism c) Multilevel Polymorphism d) Execution time Polymorphism

III)In an Interface, by default the methods are \_\_\_ and the variables are \_\_\_

a) final, static b) public, static c) abstract, static d) constant, public

IV)The special function that is invoked by default when an object is created using the new keyword is called

a) Overloaded function b) Overridden Function c) Constructor d) Parameterized Function

V) Which of the following types of inheritance is not allowed in Java

a) Single inheritance b) Multiple Inheritance c) Multilevel Inheritance d) Hierarchical Inheritance

Q2) Short questions (5x3=15)

a) Differentiate between Method Overloading and Method Overriding

b) What do you mean by bytecode in Java? Explain what makes Java a platform independent and portable language?

c) Differentiate between checked and unchecked exceptions

Q3) Long Questions (15X2)

a) What do you mean by Inheritance in OOP? Illustrate the following types of inheritance using diagrams and clearly distinguish the parent and children in the diagram –

i) Single Inheritance

ii) Multilevel Inheritance

iii) Multiple Inheritance

iv) Hierarchical Inheritance

v) Hybrid Inheritance

Which type of inheritance is not supported in Java and why?

b) What do you mean by a Constructor in Java and when does it get called? Elaborate on the usage of the 5 major keywords used in Exception handling? Differentiate between throw and throws keyword in Java Exception Handling.