1. ***What do you mean by Class, subclass and Object?***

⮊*Class: A class is a term that describes a specification for a collection of objects with common properties.*

⮊ *Subclass: A subclass is a class that inherits all the properties of the parent class, but that also includes extra specialization.*

1. ***Define method.***

In [object-oriented programming](http://searchsoa.techtarget.com/sDefinition/0,,sid26_gci212681,00.html), a method is a programmed procedure that is defined as part of a [class](http://whatis.techtarget.com/definition/0,,sid9_gci211790,00.html) and included in any [object](http://searchsoa.techtarget.com/sDefinition/0,,sid26_gci212680,00.html) of that class. A class can have more than one method. A method in an object can only have access to the data known to that object, which ensures data integrity among the set of objects in an application. A method can be re-used in multiple objects.

1. ***What is statement and block?***

A statement is the smallest unit that is a complete instruction. Statements must end with a semi-colon. Statements generally contain expressions (expressions have a value)

One of the simplest is the Assignment Statement

<variable> = <expression>;

A block is a sequence of statements, local class declarations and local variable declaration statements within braces.

1. ***Explain Encapsulation***

*Encapsulation refers to the hiding of items of data and methods within an object. This is achieved by specifying them as private in the definition of the class*

1. ***Explain Inheritance***

⮊ *Inheritance allows a class to be a subclass of a superclass, and thereby inherit public and protected variables and methods of the superclas.*

1. Explain Polymorphism.
2. ***What are the advantages of inheritance***.

⮊Code reusability.

⮊Code maintenance.

⮊Impleminting OOP.

1. ***What are the rules to name variable***?

*⮊The rules of naming variables:*

* + *The name must begin with a letter, $(dollar sign), or any Unicode character that denotes a letter in a language. Do not begin the name with a digit.*
  + *The first character of the name can be followed by a series of letters or digits, where a digit is 0-9 or any Unicode character that denotes a digit in a language.*
  + *The name must not be a java language key word.*

1. ***What do you mean by array?***

Array is a collection of elements of similar data type and these elements are stored in continuous memory locations.

Arrays are objects in Java that store multiple variables of the same type. Arrays can hold either primitives or object references.

1. ***Explain about enum?***

*⮊Enum: An enum specifies a list of constant values that can be assigned to a particular type. An enum is NOT a String or an int. An enum constant's type is the enum type. An enum can be declared outside or inside a class, but NOT in a method.*

For example, to specify a days-of-the-week enum type as:

public enum Day {

SUNDAY, MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY

}

1. ***What is the difference default constructor and overloaded constructor.***

*⮊Default constructor: The default constructor initializes the instance variables declared in the class. The compiler creates a default constructor only when there are no other constructor for the class. That has no parameters and does nothing.*

*⮊Override Constructor: constructor overriding  Write a program to demonstrate the overriding of constructor methods.*

1. ***What is Instanceof Operator?***

The instanceof operator allows to determine the type of an object. It takes an object on the left side of the operator and a type on the right side of the operator and returns a boolean value indicating whether the object belongs to that type or not.

1. ***What are arguments and parameters?***

*⮊Parameter:A parameter defines the type of value that can be passed to the method when it is called.*

*⮊Argument: An Argument is a value that is passed to a method when it is executed and the value of the argument is referenced by the parameter name during execution of the method.*

1. ***What is nested class?***
2. ***Write about the finalize() method.***

Finalize is a protected method in java. When the garbage collector is executes , it will first call finalize( ), and on the next garbage-collection it reclaim the objects memory. So finalize( ), gives you the chance to perform some cleanup operation at the time of garbage collection.

1. ***Difference between coupling and cohesion.***
2. ***What is constructor? Write the characteristics of a constructor.***

*⮊Constructor: Constructor is a special type of method that runs automatically when a class is instantained. Constructor is used to initialize values in the class. Constructor has the same name as the class and no return value.*

*⮊The characteristics of a constructor:*

1. *Constructor has the same name as the class.*
2. *Constructor never returns a value.*
3. ***Difference between Implicit type conversion and Explicit type conversion.***
4. ***what is the function of super and this keyword.***

*⮊This keyword: It returns the reference to the current object. It can be used inside methods .*

⮊*Super: the keyword super is used to invoke the constructor method of the super class*

1. ***what do you mean by logical and short circuit operator.***

*⮊Logical operator: Logical operator evaluates the whole expression.*

*⮊Short circuit operator: Short-circuiting just means the second operand (right hand side) is evaluated only when the result is not fully determined by the first operand*

1. ***overriding and overloading method.***

*⮊Overriding: Overriding requires the same method signature (name and parameters) and the same return type and that the original method is inherited from its superclass.*

*⮊Overloading: Overloading requires different methods signature (name and parameters) but the method name should be the same name.*

1. ***what is the difference between equals() and ‘==’?***

equals( ) is an method where “= =” is an operator. equals ( ) method is used to compare the values(i.e, length, similarities) of strings usually string objects. The equals( ) method requires one argument that must be a String object and that is to be compared with the original object. This method always return Boolean data. Whereas “= =” operator is used to compare the reference or check if two variables point at the same instance of a string object

1. ***what do you mean by package.what is the default package.***

A package is a collection of classes and interfaces that provides a high-level layer of access protection and name space management.

Default package is java.lang.

1. ***Difference between static and instance veriable.***

Instance : - These are typical object level variables, they are initialized to default values at the time of creation of object, and remain accessible as long as the object accessible.  
Static: - These are the class level variables. They are initialized when the class is loaded in JVM for the first time and remain there as long as the class remains loaded. They are not tied to any particular object instance.

1. ***What is the abstract class with example.***

A class containing abstract method is called Abstract class. An Abstract class can't be instantiated.   
Example of Abstract class:  
abstract class testAbstractClass {   
  protected String myString;   
  public String getMyString() {   
  return myString;   
  }   
  public abstract string anyAbstractFunction();  
}

1. ***What do you mean by garbage colletion? How an object eligible for garbage collection.***

*⮊The process of disposing of dead objects is called garbage collection.*

*⮊An object is eligible for garbage collection when no live thread can access it. If the reference variable that refers to the object is set to null, the object becomes eligible for garbage collection, provided that no other reference is referring to it.*

1. ***Differcence between primitive data type and wrapper class.***
2. Define Local variables, Local references variables.
3. Define Instance variables and instance references variables.
4. Write about Interface.
5. ***What is Unicode?***

*⮊Unicode: Unicode is a standard character set that was developed to allow the characters necessary for almost all languages to be encoded. It uses a 16-bit to represent a character*

1. Write about The is-A relation and has-A relation.
2. What is the difference between a switch statement and an if statement?

If statement is used to select from two alternatives. It uses a boolean expression to decide which alternative should be executed. The expression in if must be a boolean value. The switch statement is used to select from multiple alternatives. The case values must be promoted to an to int valu

1. Write syntax of while loop and do-while loop and for loop.
2. ***Write about continue statement and break statement.***
3. ***What is Anonymous class?***

*⮊ Anonymous class: An Anonymous class is a kind of local class that does not have a name and is declared inside of an expression.*