

Lesson-2

Elementary Concept of Objects and classes

11. Answer the following questions:

1. An object is a fundamental unit of Object Oriented Programming and represents the real life entities.

The objects are categorised in 2 ways

- (a) Real World Objects → Ex. Table
 (b) Software Objects → Ex. Student

2. class Employee

(a) characteristics

Name

Age

Dept

Salary

Address

Methods

Accept()

Display()

(b) class computer

Monitor

Keyboard

Mouse

Printer

Speaker

input()

output()

3. Each real world object contains characteristics and behaviours, the characteristics basically comprises the part of its body and behaviour is the purpose of its use or functions.
 Ex. Mobile, Table, Flower, Dog, Camera

4. A software object may be defined as an object that is created while writing a Java program. The characteristics and behaviours of real world object are referred to as data members and member functions of software objects respectively.

5. A class is used to create various objects which possess different characteristics and common behaviour defined within it. So we can say that a class is a blue print or a prototype of an object. Thus, each object follows all the features which are defined within the class.
 Ex. If 'car' is the class with the characteristics colour, model and version then Nano, 120 and Swift Dzire can be objects of the class 'car'.

6. A class is used to produce or create various objects containing different attributes and common behaviours. Hence, a class is called an object factory.

7. Employee Staff = new Employee();
 ↓ ↓ ↓ ↓
 class object Keyword constructor

8. Since, an object possesses instant variables and member methods defined within the class. It is called an instance of a class.

9. A class is a tool for the instances to create user defined data types. The class name becomes the data type for the instances used in the program. It is such a data type that includes various predefined data types within it. Hence, the class is said to be a composite data type.

10. Computer Keyboard = new Computer();

11. colour and size → behaviour
 Run() and out() → methods

12. (i) false
 (ii) false
 (iii) True
 (iv) True
 (v) false

14. class Picnic

```

ε
void display()
ε
    String venue = "St. Mary";
    String place = "M. Abu";
    String time = "8 AM";
    System.out.println(venue + "\n" + place +
        "\n" + time);
}
void display2()
ε
    System.out.println("80" + "\n" + "Sis Surentra"
        + "\n" + "0707");
}
public static void main(String args[])
ε
    Picnic pic = new Picnic();
    pic.display(); pic.display2();
}
  
```