Lesson-2
Elementary concept of Objects and classes

I. Fill in the blanks:

1. A class is also considered as an object factory.
2. The data members of a class differ on various characteristics.
3. The object of a class is represented through different attributes.
4. The term instantiation is used for creating various objects.
5. The class is a factory for the object
6. New Keyword indicates an operator for dynamic allocation of an object.
7. Objects are also termed as class tags or instance of a class.
8. Different objects of a class have common behaviour.

II. Answer the following questions:

1. An object is a fundamental unit of object-oriented programming and represents the real life entities.
   car is an example of object. It has characteristics like colour, model etc. It

has behaviours like Start the engine, accelerate the car etc.

Q.	Characteristics	Methods
a)	Emp. No.	computeSalary()
	Pan No.	computeTax()
	Salary	
	Name	
	Income Tax	
b)	Bank Name	open_account()
	Bank address	deposit_Money()
	IFSC Code	
	MICR Code	
	Accounts	
e)	Parkname	open_park()
	Parkaddress	close_park()
	Ticketprice	
	Openingtime	
	closingtime	
f)	Name	buy_medicine()
	quantity	Sell_medicine()
	ManufacturingDate	
	expiryDate	
	Price	

(c), (d), (g), (h) of Q2. you can do yourself.

3. An object is an entity having a specific identity, specific characteristics and specific behaviour.
Example: car, Mobilephone, Student etc

4, A software object replaces the characteristics and behaviours of a real world object with data members and member methods respectively.

5, A class is used to create various objects that have different characteristics and common behaviours. Each object follows all the feature defined within a class. That is why class is also referred to as a blue print or prototype of an object. This way we can say that they are inter-related.

6, A class can create objects of itself with different characteristics and common behaviour just like a factory can produce similar items based on a

particular design. Hence, class is also referred to as 'Object Factory'.

7. This statement creates an object of class Employee. The newly created object is assigned to a variable named staff which is Employee type.

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 can contain data members of various primitive and reference data types. Hence, class is known as composite data type.

10. Computer keyboard = new Computer();

11. characteristics — colour, condition
Behaviours/Methods — throw(), stop()

12. (i) False
(ii) False
(iii) true
(iv) true
(v) False

13 characteristics

Ball
GoalKeeper
Defender
Forwardplayer
Referee

Behaviours

Making_a_goal()
Passing_ball()
hitting_corner()
making_fault()

14. class Picnic
{
public void display1()
{
System.out.println("Venue: Polo Ground");
System.out.println("Place: Mount Abu");
System.out.println("Time: 9:00 Am");
}
public void display2()
{
System.out.println("No. of Students: 50");
System.out.println("Teacher: Sir Surendra");
System.out.println("Bus No.: 0707");
}
public static void main(String args[])
{
Picnic pic = new Picnic();
pic.display1();
pic.display2();
}
}