

UNIT - 5

2 marks

- 1) Define class. Give example.

Class : A user-defined prototype for an object that defines a set of attributes that characterize any of object of the class. The attributes are data members (class variables and instance variables) and methods, accessed via dot notation.

Example : class student:

```
def __init__(self):
```

```
    self.name = "hari"
```

```
    self.branch = "ECE"
```

```
def display(self):
```

```
    print self.name
```

```
    print self.branch.
```


2) Inheritance:

The transfer of characteristics of a class to other classes that are derived from it.

There are mainly 2 types of inheritance

- a) Single inheritance
- b) Multiple inheritance

3) Overriding:

When there is a method in super class, writing the same method in subclass so that it replaces the super class method is called "method overriding". The programmer overrides the super class methods when he does not want to use them in sub class.

4) Constructor:

A constructor is a special method that is used to initialize the instance variables of a class. In the constructor, we create the instance variables and initialize them with some starting values. The first parameter of the constructor will be "self" variable that contains the memory address of the instance.

5) Differentiate Errors and Exceptions?

- 1) Errors are the problems in a program due to which the program will stop the execution.
- 2) On the other hand, exceptions are raised when the some internal events occur which changes the normal flow of the program.