**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**

**SEMESTER-EVEN**

**UNIT: 1 ASSIGNMENT 1**

**Subject Name:** Problem Solving Using Advance Python

**Name of Faculty: Harsh Vardhan Mishra Submission Date:5/5/2021.**

1. What is a class? How do you define it?
2. Differentiate between class variable and instance variable.
3. Write short notes on magic methods with example.
4. What is the role of \_\_init\_\_() and \_\_new\_\_() method in python? Explain with example.
5. Differentiate among instance method, class method and static method?
6. Explain class attributes (\_\_name\_\_,\_\_\_dict\_\_\_\_,\_\_doc\_\_) and bulit in function (hasattr(), setattr(), getattr() and delattr()) with example.
7. What do you understand by Garbage collection? Explain.
8. Explain the difference between \_\_str\_\_() and \_\_repr\_\_() method with the help of code.
9. Difference between del keyword and \_\_del\_\_() method.
10. What are namespaces in python? Explain different types of namespaces.
11. Write a program that uses a class attributes to define some default titles (Mr./Ms.) for faculty in a college .Display the name of faculty along with the title and their department(CSE/IT/ etc.).
12. Write a static method that checks whether all words in a list starts with a vowel.