

**PART-I: Choose the best answer for the following questions [1pt. Each]**

1. Consider the following python code

```
Lst=[0,2,10,6,3,-4]
Lst.reverse()
Lst.pop()
Lst.insert(1,3)
print Lst
```

- A. [0, 2, 3, 10, 6, 3]
- B. [0, 2, 10, 6, 3, 3]
- C. [-4, 3, 3, 6, 10, 2]
- D. [3,-4, 3, 6, 10, 2]

2. Which one of the following modes (parameter) is used to **write onto a file**?

- A. "a"
- B. "w"
- C. "r"
- D. B and C
- E. A and B

3. Consider the following python code?

```
a= "Engineering"
b= "Engineering"
b+=a
print a is b
```

- A. True
- B. False

4. Consider the following python code

```
tp= (0, 2, 3, 4, 45, 55)
print tp[-5] + tp[5]
```

- A. 45
- B. 55
- C. 57
- D. 47

5. Which one of the following is the correct definition of a tuple?

- A. A=[1,2,3,4,5]
- B. A="1,2,3,4,5"
- C. A=(1,2,3,4,5)
- D. A={1,2,3,4,5}



**PART-II: Write short and precise answer for the following questions[6 pts]:**

1. Explain the difference and similarity between *string*, *tuple*, *list* and *dictionary* with example? [2 pts.]
2. Explain what function is and discuss its advantages? [2 pts]
3. Explain in details why we use file? [2 pts.]

**PART – III:- Write the output of the following python program on the space provided**

```

Problem 1 [4 pts]
s1="Automatic repair"
s2="troubleshooting"
s1+=s2
s3= s1[6:10] +s2[-6:-2]
print s3
print len(s3)
s4=s3[:-4:1]
print s4
print "tic" in s3

```

```

Problem 2 [3pts]
from math import *
def pre(a,b=2,c=3):
    x=abs(a*b**c)
    print x
pre(3)
pre(1,4)
pre(2,1,-2)

```

```

Problem 3 [4 pts]
x=[-7,22,90,25]
x.sort(reverse =True)
print x
x.insert(2,3)
print x[2:5]
print x
x[0:3]=[4,9,8]
print x

```



**Problem 4 [3 pts]**

```
for i in range (6):
    if not(i %2==0):
        print("#")*(5-i)
    else:
        print("@")*(5-i)
```



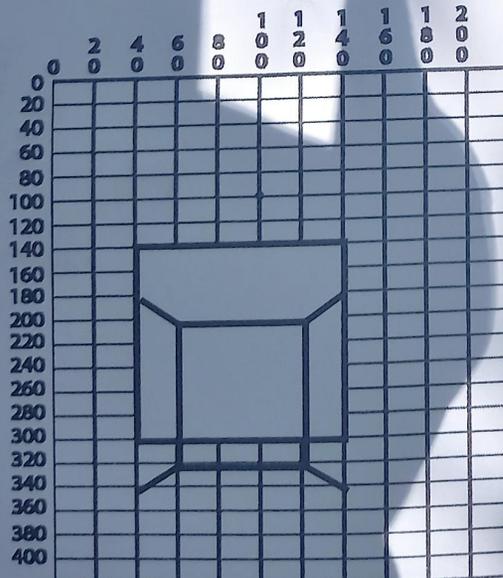
**Problem 5 [2 pts]**

```
x=2+3**3%2%2*4/2
print x
```



**PART – IV: Write a python program for the following questions?**

- Write a python program that displays the following object. Use the possible method to optimize the code? [3 Pts]



2. Write a python program which creates "course.txt" file and then write your four subjects that you are registered for this semester.

2.1 append one more subject to the existing file [4 Pts]

3. Write a python program that reads python dictionary keys and values from the keyboard and sort its element using a key value? [3 Pts]

4. Write python a program that displays the world in the right hand side? [3 Pts]

