KEONICS COMPUTER TRAINING CENTER, HUBLI.

Total Marks=50   **Subject: Artificial Intelligence with Python**

Python Programming Theory

A. Answer the following for 1 Marks   Marks(1X10)

1. What is a lambda function? Give an example.
2. How does break & continue work? Give an Example.
3. What is a dictionary in Python, also give an example?
4. Write a Python Program to Check if a Number is Positive, Negative or 0.
5. What are the different types of operators in Python?
6. What are iterators python?
7. What is the function of iter() and next() in Python?
8. How do you create a generator function in Python?
9. Write a Python Program to Add Two Numbers?
10. What is the output of following program.

```
def func1(a):
    a=a+2
    print(a)
    a=a*2
    print(a)
    return a
print(myfunc(2))
```

B. Answer the following for 2 marks   Marks(2X5)

1. What is the difference between list and tuples in Python?
2. What are local variables and global variables in Python & explain with example?
3. List four of the common built-in data types in Python with example using type()?
4. Write a Python Program to Find the Square root of a number using lambda expression?
5. What are functions in Python? Mention the types of functions.

Python Programming Practicals

C. Answer the following with python programs   Marks(6X5)

1. Write a program in Python to print odd numbers in a List of finite numbers?
2. Write a program in Python to check if a number is prime or not?
3. Write a Python Program to Convert Two Lists Into a Dictionary?
4. Write a Program to convert Decimal number to Binary,Octal and HexaDecimal using Functions?
5. Write a Python Program to find area of a circle ?