

# **ADITYA SILVER OAK INSTITUTE OF TECHNOLOGY**

**Department of CE/IT**

## **Question Bank**

**SUBJECT NAME: PYTHON PROGRAMMING**  
**SUBJECT CODE: 2180711**

**SEMESTER: VIII<sup>th</sup>**  
**ACADEMIC YEAR: 2018-19**

- 1) How to comment specific line(s) in Python program?
- 2) What is list in Python ? Demonstrate use of any three methods of list.
- 3) What is the use of islower() and isupper() method?
- 4) Give the syntax and significance of raw\_input() and input() methods.
- 5) Write a Python program to check whether the given no is Armstrong or not using user defined function.
- 6) Give the syntax and significance of string functions: title() and capitalize().
- 7) Give the output of following Python code : l=[(x, y) for x in [1,2,3] for y in [3,1,4] if x != y]  
print l
- 8) Read a text file in Python and print no. of lines and no. of unique words.
- 9) Briefly describe the methods of regular expression.
- 10) Give the output of following Python code: str1= 'This is Python' print "Slice of String : ", str1[1:4:1] print "Slice of String : ", str1[0:-1:2]
- 11) Is tuple mutable? Demonstrate any two methods of tuple.
- 12) Create a class Employee with data members: name,department and salary. Create suitable methods for reading and printing employee information.
- 13) Write a Python program to overload + operator.
- 14) Explain built-in datatypes of python.
- 15) What is dictionary in Python? Explain with an example.
- 16) What is lambda function in Python? Explain with an example.
- 17) Write a python program to know the current working directory and to print all contents of the current directory. What changes we need to make in the program if we wish to display the contents of only 'mysub' directory available in current directory?
- 18) Write a python program to append data to an existing file 'python.py'. Read data to be appended from the user. Then display the contents of entire file.
- 19) Write a python program to retrieve strings starting with m and having 5 characters.
- 20) Write a python program to retrieve name and date of birth (mm-dd-yyyy) of students from a given file student.txt.
- 21) What are the differences between C and Python?
- 22) Write a Python program that counts the number of occurrences of the character in the given string. Provide two implementations: recursive and iterative.

- 23) How map can be used in Python program? Explain with a suitable example.
- 24) Explain the function which is used to retrieve the parts of URL.
- 25) What is duck typing philosophy of python?
- 26) What is Method Resolution Order (MRO)? Explain the principles followed by MRO with example.
- 27) Write a python program to arrange the characters of a given string 'welcome' in an alphabetical order using insertion sort algorithm.
- 28) Explain the types of methods available in python with a suitable example of each method.
- 29) Which are the different ways of creation of threads? Explain each with an example.
- 30) What are the differences between abstract class and interface? Write a python program in which Maruti and Santro sub classes implement the abstract methods of the super class Car.
- 31) Create a class student with following member attributes: roll no, name, age and total marks. Create suitable methods for reading and printing member variables. Write a python program to overload '==' operator to print the details of students having same marks.
- 32) Explain the creation of different types of containers available in Tkinter? Elaborate the explanation with suitable example.
- 33) Create following regular polygons (regular means all sides the same lengths, all angles the same) using for loop in turtle
- An equilateral triangle
  - A square
  - A hexagon
  - An octagon
- 34) Explain the major steps used to create widgets. Write a python program to display a label upon clicking a push button.
- 35) Write Python GUI program to create two push buttons using Tkinter. Background color of a frame should be changed when different buttons are clicked.
- 36) Explain steps to create widgets. Write Python program to display a label on clicking a push button.
- 37) How filter can be used in Python program? Explain with a suitable example.
- 38) Write a Python program for TCP/IP chat application.
- 39) List out keywords used in exception handling.
- 40) Write a Python program to implement the concept of inheritance.

**Subject Coordinator**

**HOD (CE/IT)**

Prof. Samarth Modi

Prof. Sagar Patel