



R18 Regulation

Subject code: 2P4EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY  
(Autonomous, Accredited by NAAC with 'A' Grade)

**B.Tech V Semester Supplementary Examinations, July 2022**  
**PYTHON PROGRAMMING**

(CSE)

**Maximum Marks: 70**

Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.  
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.  
3. Part B consists of 5 Units. Answer any one full question from each unit.  
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Differentiate between compiled and interpreted languages?
- 2 List some of the keywords in python
- 3 Why \* is called string repetition operator?
- 4 Write the syntax for nested for loops and nested while loop statements.
- 5 What is the purpose of global keyword in Python?
- 6 Differentiate between append() and extend() methods?
- 7 What are the attributes of file objects?
- 8 Write any two Differences between numpy and scipy?
- 9 What is an error? Write different types of errors in python.
- 10 How to handle multiple exceptions with single except clause.

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 A. How do you run a python script in various modes? Explain with a python program.  
B. Explain in detail about python type conversion and type casting with example. [ 5+5 ]

OR

- 12 Explain about the need for learning python programming and its importance. [10]
- 13 List and explain different arithmetic operators supported by Python. Discuss about their precedence and associativity with an example. [10]

OR

- 14 a) Write Python code to solve the quadratic equation  $ax^2 + bx + c = 0$  by accepting input for coefficients from the standard input.

b) Write a Python program to find numbers between 100 and 400 (both included) where each digit of a number is an even number. The numbers obtained should be printed in a comma-separated sequence. [5+5]

- 15 a) What is lambda function? What are the characteristics of a lambda function? Give an example.  
b) Describe the process of storing and accessing data using dictionaries. [5+5]

OR

16 Consider the list `std=[5,4,7,3,6,2]` and write the python code to perform the following operations

- i. Insert an element 9 at the beginning of the list
  - ii. Insert an element 8 at the end of list
  - iii. Insert an element 8 at the index position 3 of list
  - iv. Delete an element at the beginning of the list
  - v. Delete an element at the end of the list
  - vi. Delete an element at the index position 3
  - vii. Print the list in reverse order(end to start)
  - viii. Delete all the elements of the list
- [10]

17 Elaborate the process of designing your own modules with a appropriate example. [10]

OR

18 Write Program to print the number of lines, words and characters present in the given file. [10]

19 a) List and explain the different phases involved in object-oriented programming language.

b) Write a Python program to demonstrate Multiple Inheritance. [5+5]

OR

20 Observe the following code and justify the below statements

```
try:  
    stmt-1  
    stmt-2  
    stmt-3  
except XXX:  
    stmt-4  
stmt-5
```

- i. What happens "If there is no exception".
  - ii. What happens "If an exception raised at stmt-2 and corresponding except block matched".
  - iii. What happens "If an exception raised at stmt-2 and corresponding except block not matched".
  - iv. What happens "If an exception raised at stmt-4".
  - v. What happens "If an exception raised at stmt-5".
- [10]