Regulation 18 *Subject code: 2O6FC*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VI Semester Supplementary Examinations, June/July 2023

Python Programming

(Information Technology)

Maximum Marks: 70 Date:05.07.2023 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 which carries 10M.
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 Write the need of Python Programming?
2 What is control flow in the context of algorithms?
3 Define Python interpreter?
4 What are parameters and arguments in Python functions?
5 What is iteration in Python?
6 What is a tuple?
7 What is sorted() built-in function
8 What is a Lambda function
9 Define Tkinter.
10 Define file in Python.

Part-B

Answer All the following questions. (10MX 5=50Marks)

11 Explain the concept of control flow in algorithms and how it influences the execution order of statements. Provide examples to illustrate different control flow structures. (10)

OR

12 Discuss the role of functions in algorithm development. Explain how functions help modularize code, improve code reuse, and enhance algorithmic problem solving. (10)

13 Explain the purpose and usage of comments in Python code. Discuss how comments can improve code readability, provide explanations, and make code more maintainable. (10)

OR

14 Provide an illustrative program that calculates the distance between two points. Discuss the mathematical formula used and explain the steps involved in the program. (10)

15 Discuss the purpose and usage of the "if-else" statement in Python. Provide an example scenario where it would be appropriate to use an "if-else" statement. (10)

OR

16 Explain the concept of fruitful functions in Python. Discuss how they return values and provide examples illustrating their usage. (10)

17 Explain the concept of lists in Python. Discuss the operations that can be performed on lists, such as appending, concatenating, and indexing. Provide examples to illustrate these operations. (10)

OR

18 A. Explain about different types of arguments in Python
B. Write a Python function that computes the harmonic sum of n. (5+5)
Harmonic Sum = $(1/2) + (1/4) + (1/8) + (1/16) + \ldots\ldots + (1/2^n)$

19 Define GUI and explain Tkinter in GUI in detail. (10)

OR

20 Create radio buttons using colors like Red, Green and Blue color. (10)