R22 Regulation *Subject code: 4E3EB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Regular/Supplementary Examinations, December 2024

Python Programming

(Common to CSE, CSE(AI&ML) & CSE(DS))

Maximum Marks: 60 Date:06.12.2024 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 10 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	CO	Bloom Tx
All the following questions carry equal marks	(10X1M=10 Marks)		
1.a)	List the Features of python Programming language.	1	L1
b)	Differentiate Mutable and immutable datatypes in python.	1	L2
c)	Write about membership operators with an example.	2	L2
d)	How to use Pass Statement in Python.	2	L2
e)	List the properties of dictionary in python.	3	L1
f)	Define Text file.	3	L1
g)	Write how to import a package in Python.	4	L1
h)	List the different modes of opening a File.	4	L1
i)	What is the purpose of the "try-except" block in Python?	5	L2
j)	What is an exception?	5	L1
	Part-B		
Answer All the following questions.	(5X10M=50Marks)	CO	Bloom Tx
2	Discuss the basic syntax rules and structure of Python. Explain the significance of indentation and how it contributes to the readability of Python code. [10M]	1	L3
	OR		
3	Make use of variables and data types for python programming [10M]	1	L3
4	(a) Apply break and continue statements in Python Programming. [5M] (b) Develop a python code to accept 3 digit number from the user and check whether it is an Armstrong or not. [5M]	2	L3 L3
	OR		
5	Construct a python programming by using different types of operators with syntax and description [10M]	2	L3
6	Analyze the list data structure of python programming based on its features and methods. [10M]	3	L4

	OR		
7	List and explain different types of arguments in functions. [10M]	3	L4
8	Apply the following built-in functions with syntax and description. [2.5*4=10M] a) open() b) seek() c) tell() d)read()	4	L3
	OR		
9	(a) Apply different functions available in Numpy. [5M] (b) Make use of different data structures available in Pandas. [5M]	4	L3 L3
10	(a) Differentiate between Error and Exception. [5M] (b) Classify different types of exceptions with an example in python [5M]	5	L4 L4
	OR		
11	List out the different types of inheritance. Explain each with an example. [10M]	5	L4