R22 Regulation *Subject code: 4O5DA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, May 2025

PYTHON PROGRAMMING

(ECE)

Maximum Marks: 60 Date: 26.06.2025 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

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	Define Python and list its key features.	1M	1	L2
b)	What are the different ways to comment code in Python?	1M	1	L2
c)	What is the difference between == and is operators?	1M	2	L2
d)	Write a Python program to check if a given number is even or odd using conditional statements.	1M	2	L2
e)	How do you handle exceptions in Python?	1M	3	L2
f)	Explain the concept of lambda functions.	1M	3	L3
g)	What are the different file modes in Python?	1M	4	L2
h)	Write a Python program to read and write data to a text file.	1M	4	L2
i)	Define a class and object in Python.	1M	5	L2
j)	What is the difference between public, private, and protected access modifiers in Python?	1M	5	L2

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	Elucidate the string and its methods with example.	10M	1	L3
	OR			
3	a) Write history of Python. b) List features and applications of Python.	5M 5M	1	L2 L3
4	a) Write a Python program to display Fibonacci series. b) Explain break and continue statements with the help of for loop with an example.	5M 5M	2	L2 L3
	OR			
5	a) Write a Python program to find sum of 'N' natural numbers. b) Discuss the assignment and bitwise operators supported in Python.	5M 5M	2	L2 L3
6	a) Illustrate default arguments with an example. b) Write a function to return right most digit in the entered number.	5M 5M	3	L3 L3
	OR			

7	a) Express function to do all arithmetic operations. b) What are formal and actual arguments? Explain with example.	5M 5M	3	L2 L3
8	a) Describe about name spacing. b) Explain about the import statement in modules.	5M 5M	4	L3 L2
	OR			
9	Explain the implementation of packages with NumPy and Pandas in detail.	10M	4	L2
10	a) Compare method overloading and overriding. b) Describe about class constructor (_init_()) with example.	5M 5M	5	L2 L3
	OR			
11	What is inheritance? Illustrate types of inheritance with python code.	10M	5	L3