R22 Regulation *Subject code:4O5DA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, April 2026

PYTHON PROGRAMMING

(ECE)

Maximum Marks: 60 Date:24.04.2026 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	BTL
1.a)	Define variable in python and how to check type of a variable.	1M	1	1
b)	Define Indentation.	1M	1	1
c)	List the membership operators and give examples for usage.	1M	2	1
d)	Write for loop that prints prime numbers from 2 to 25 using range function.	1M	2	1
e)	Write about the default arguments in functions.	1M	3	2
f)	List the properties of dictionary in python.	1M	3	1
g)	List the various methods for importing a package in Python.	1M	4	1
h)	Define text file.	1M	4	1
i)	How to handle multiple exceptions with single except clause.	1M	5	1
j)	Define class and object.	1M	5	1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
2	a) Explain about input/output statements in python with suitable examples. b) Define an Identifier? Mention the rules to define an identifier.	5M 5M	1	2 1
	OR			
3	a) Explain type conversion in Python with an example program. b) Define Python keywords? List any ten keywords.	6M 4M	1	2 1
4	What is the purpose of else clause for a loop? Explain how else works with while and for loops with examples.	10M	2	5
	OR			
5	a) Explain Python control statements with appropriate examples. b) Build a python program to print the following pattern using looping statements 1 1 2 1 1 2 3 2 1 1 2 3 4 3 2 1	5M 5M	2	2 6

6	a) Define lambda function? Illustrate the characteristics of a lambda function? Give an example. b) Summarize the process of storing and accessing data using dictionaries.	5M 5M	3	2 2
	OR			
7	a) Explain about Default and variable length arguments each with an example programs. b) Construct a Python Program to find out common elements in given lists.	5M 5M	3	2 3
8	Explain the following built-in functions with syntax and description. a) open() b) seek() c) tell() d)read()	10M	4	2
	OR			
9	a) Develop a python program to find the determinant for a 2*2 matrix using scipy library module b) List different functions available in Numpy.	6M 4M	4	6 4
10	a) How to declare a constructor method in Python? Explain with an example. b) Explain the features of Inheritance in python with appropriate examples.	5M 5M	5	2 2
	OR			
11	a) Explain about self-variable in python. b) Define Exception. Explain how to create user defined exception with an example program.	4M 6M	5	2 2