R20 Regulation *Subject code: 3P5FB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, April 2026

PYTHON PROGRAMMING

(IT)

Maximum Marks: 70 Date: 17.04.2026 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)		Marks	CO	BTL
1	Define input and output statements in python.	2M	1	L1
2	Write the rules for identifier?	2M	1	L1
3	Write the syntax of while loop?	2M	2	L1
4	What is range function?	2M	2	L1
5	How to access values in a dictionary?	2M	3	L1
6	Design about creating a tuple in Python?	2M	3	L1
7	Define the scope and lifetime of a variable in python?	2M	4	L1
8	Why is * called string repetition operator?	2M	4	L1
9	What are the significant features of the pandas library?	2M	5	L1
10	Explain different types of data structures in pandas?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain the features of Python programming language in detail.	10M	1	L2
	OR			
12	List and explain different arithmetic operators supported by python. Discuss about their precedence and associativity.	10M	1	L2
13	Describe python jumping statements with examples.	10M	2	L2
	OR			
14	Explain about looping statements with suitable example	10M	2	L2
15	a) Write a python program to add two matrices using array. b) Give a comparison between lists, tuples and dictionaries.	5M 5M	3	L2
	OR			
16	What is a list in python? How to create nested lists? Explain with suitable example.	10M	3	L2

17	a) List some of useful string methods/ functions. b) Explain in detail about functions.	5M 5M	4	L2
	OR			
18	What type of parameter passing is used in python? Justify your answer with sample program.	10M	4	L2
19	a) Explain array slicing in numpy with suitable example. b) Explain the operations that can be performed by numpy.	5M 5M	5	L2
	OR			
20	a) Create pandas data frame to perform add an index, row or column? b) Explain in detail about pandas series.	5M 5M	5	L2