R20 Regulation *Subject code: 3O5DA*

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: 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	State any four applications where python is more popular.	2M	1	L1
2	What are membership operators?	2M	1	L1
3	What is lambda function in python?	2M	2	L1
4	Define Iteration.	2M	2	L1
5	How we can modify a string in python?	2M	3	L1
6	What is a negative index in python?	2M	3	L1
7	Define polymorphism.	2M	4	L1
8	What is the use of init method in python?	2M	4	L1
9	Define PANDAS.	2M	5	L1
10	Write about dataframe.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	What are the different loop control statements available in python? Explain with suitable examples.	10M	1	L2
	OR			
12	Explain the operators in python, in the order of their precedence.	10M	1	L2
13	a) Tabulate the different modes for opening a file in detail. b) List any five math module functions used in python.	5M 5M	2	L2
	OR			
14	What is the use of pass statement? Illustrate with an example program.	10M	2	L2
15	a) Explain with an example, how + and * operators work with strings. b) Define list? How list is created and access element in list?	5M 5M	3	L2
	OR			
16	What is meant by tuple and how it is created? What are the built-in functions used in tuple? Explain with suitable example.	10M	3	L2
17	a) Define class and object? What is the relation between an object and a class? b) Write a program which shows how to define a class, how to access member	5M 5M	4	L2

	functions and how to create and access objects in python?			
	OR			
18	Create a function that counts the occurrences of a specific character in a given string.	10M	4	L2
19	Explain different types functions in Arrays with examples.	10M	5	L2
	OR			
20	Explain various data frame functions with examples.	10M	5	L2