R20 Regulation *Subject code: 3P5EB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

PYTHON PROGRAMMING

(CSE)

Maximum Marks: 70 Date: 20.11.2025 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	List the differences between python2 and python3?	2M	1	L1
2	What's the importance of comments in programming? How do we write comments in python?	2M	1	L1
3	What is 'pass' statement?	2M	2	L1
4	Define iterable and iterator objects.	2M	2	L1
5	Differentiate between append() and extend() methods.	2M	3	L1
6	What is the purpose of global keyword in Python?	2M	3	L1
7	What are the attributes of file objects?	2M	4	L1
8	Write any two Differences between numpy and scipy?	2M	4	L1
9	What is an error? Write different types of errors in python.	2M	5	L1
10	How to handle multiple exceptions with single except clause.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) How do you run a python script in various modes. Explain with a python program. b) Explain in detail about python type conversion and type casting with example.	5M 5M	1	L2
	OR			
12	Explain about the need for learning python programming and its importance.	10M	1	L2
13	List and explain different arithmetic operators supported by Python. Discuss about their precedence and associativity with an example.	10M	2	L2
	OR			
14	a) Write Python code to solve the quadratic equation ax**2 + bx + c = 0 by accepting input for coefficients from the standard input. b) Write a Python program to find numbers between 100 and 400 (both included) where each digit of a number is an even number. The numbers obtained should be printed in a comma-separated sequence.	5M 5M	2	L2

15	a) What is lambda function? What are the characteristics of a lambda function? Give an example. b) Describe the process of storing and accessing data using dictionaries.	5M 5M	3	L2
	OR			
16	a) Write a python program illustrating how a function returns another function. b) Write a Python Program to find product of two matrices.	5M 5M	3	L2
17	Write a Program to print the number of lines, words and characters present in the given file	10M	4	L2
	OR			
18	a) What is Numpy. Describe the importance of Numpy. b) Write a Python program to delete a specific record from the binary file.	5M 5M	4	L2
19	a) List the various properties of a file briefly describing each of them. b) Write a Python program to demonstrate Multiple Inheritance.	5M 5M	5	L2
	OR			
20	a) List and explain the different phases involved in object-oriented programming language. b) Write a Python program to demonstrate Multiple Inheritance.	5M 5M	5	L2