



R20 Regulation

Subject code: 3P5FB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

PYTHON PROGRAMMING

(IT)

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	State any four applications where python is more popular?	2M	1	L1
2	What are membership operators? Give an example.	2M	1	L1
3	How pass statement is different from a comment?	2M	2	L1
4	What is range function?	2M	2	L1
5	How to access values in a dictionary?	2M	3	L1
6	What are the features of tuple data structure?	2M	3	L1
7	Can a python function return multiple values? If yes, how it works?	2M	4	L1
8	What are default arguments?	2M	4	L1
9	Define Numpy?	2M	5	L1
10	Define Data Frame in Pandas?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Estimate the features of Python programming language in detail?	10M	1	L2
OR				
12	Explain different operators in python with an example.	10M	1	L2
13	What are the different loop control statements available in python? Explain with suitable examples.	10M	2	L2
OR				
14	Explain about looping statements with suitable example.	10M	2	L2
15	a) Explain the List Accessing Methods and List Comprehension. b) Write a python program considering a list with five different Celsius values. Convert all the Celsius values into Fahrenheit.	5M 5M	3	L2
OR				

16	a) Discuss about tuples in python. b) Write a python program to perform addition of two matrices using numpy.	5M 5M	3	L2
17	a) What is lambda function? Why it is used? Give an example. b) Explain split () and join () functions in python?	5M 5M	4	L2
	OR			
18	Explain string manipulation concepts with an example?	10M	4	L2
19	a) Justify how numpy arrays better than list in python. b) Explain negative indexing in numpy arrays with suitable examples	5M 5M	5	L2
	OR			
20	a) Demonstrate how to delete pandas data frame's index, rows and columns. b) Explain in detail about panda data frame?	5M 5M	5	L2