



R20 Regulation

Subject code:3P4HD

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

## B.Tech IV Semester Supplementary Examinations, December 2025

### PYTHON PROGRAMMING (CSE(DS))

Maximum Marks: 70

Date: 30.12.2025

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	Write different types of operators.	2M	1	L1
3	Differentiate between dictionary and list?	2M	2	L1
4	Define lambda function? Write syntax for lambda function.	2M	2	L1
5	Write about data hiding in python with example program	2M	3	L1
6	What is an error? Write different types of errors in python.	2M	3	L1
7	Define package. How to import a package in python program.	2M	4	L1
8	Mention the usage of modules in Python Programming.	2M	4	L1
9	Write about any two Widgets in Tkinter.	2M	5	L1
10	What are the different functions to retrieve rows from a table?	2M	5	L1

#### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) Write a python program to convert given decimal number into binary, octal and hexadecimal b) What is an Identifier? Mention the rules to define an identifier.	5M 5M	1	L2
OR				
12	a) Write about membership & identity operators in python with suitable examples. 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	1	L2
13	a) Write a python program to find all the positions of occurrence of substring in a given string. b) Define lambda function. Explain the use of lambda function with filter (), map (), reduce () functions.	5M 5M	2	L2
OR				
14	a) How to declare and call functions in Python programs? Illustrate with an example script? b) Write a Python program to print all prime numbers less than 256.	5M 5M	2	L2

15	a) How does try-except statement work? Demonstrate with an example python code? b) Write a Python class to reverse a string word by word.	5M 5M	3	L2
	OR			
16	Examine how python supports regular expressions through 'RE' module with brief introduction and various built-in methods related to it?	10M	3	L2
17	How will you create a Package & import it? Explain it with an example program.	10M	4	L2
	OR			
18	Write a python program to find the mean and variance for the following data using scipy. [ 2,23,45,56,78,89,13,33,66,89]	10M	4	L2
19	Discuss about Entry widget? Explain any five properties of Entry Widget with suitable example?	10M	5	L2
	OR			
20	Discuss about Declarative Mapping with the help of suitable example?	10M	5	L2