



R22 Regulation

Subject code:4E2AT

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Regular/Supplementary Examinations, July 2025

PROBLEM SOLVING USING PYTHON

(IT)

Maximum Marks: 60

Date:09.07.2025

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

Table with 5 columns: Question ID, Question Text, Marks, CO, BTL. Contains 10 sub-questions (1.a to j) regarding Python concepts like functions, variables, tuples, and exceptions.

Part-B

Table with 5 columns: Question ID, Sub-question ID, Question Text, Marks, CO, BTL. Contains 5 main questions (2 to 5) with sub-questions (a, b) regarding Python structuring, modules, and operators.

6	a	Write a python to check whether the given number is PAN format or not?	5M	3	L3
	b	What are conditional statements? Write a program that takes inputs as no of units consumed and generates the current bill as follows If units !=0 and <= 99 then bill is minimum Rs 180/- If units > 99 and <=199 then bill is minimum bill upto 99 Units + Rs 2/- per unit upto 199 Units. If units > 199 then bill is minimum bill upto 99 Units + Rs 2/- per unit upto 199 Units + Rs 3/- per excess unit.	5M		L3
OR					
7	a	Develop a python program to find GCD of two no's using recursion.	5M	3	L4
	b	Write a Python program to check that a string contains only a certain set of characters?	5M		L3
8	a	Write a python program to describe different ways of deleting an element from given list	5M	4	L3
	b	Write a python program to given array of integers Sort first half in ascending and second half in descending order	5M		L3
OR					
9	a	Write in brief about Tuple in python. Write operations with suitable examples.	5M	4	L3
	b	Write a program to generate dictionary with suitable operations?	5M		L3
10	a	How the files handled in python? Explain file operations with suitable examples	5M	5	L2
	b	What is package in python? Explain, how can you use package in your program with an example code?	5M		L2
OR					
11	a	What happens if except clause is written without any exception type? Explain with an example.	5M	5	L2
	b	Write a program to write a list of strings to a file, each string on a new line.	5M		L3