

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***First Semester*

Common to all Branches

GE3151 / UPST24105 – Problem Solving and Python Programming*Regulations – 2021 & 2024**Duration : 3 Hrs**Maximum : 100 Marks***PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Write an algorithm to find the biggest among three numbers.	L2	1	2
2.	Differentiate Iteration and Recursion.	L2	1	2
3.	List any five built in data types in python.	L1	2	2
4.	How do you assign a value to a tuple in python?	L2	2	2
5.	Differentiate Break and Continue statements.	L2	3	2
6.	What is the purpose of PASS statement?	L1	3	2
7.	Define cloning in List.	L1	4	2
8.	Define key value pairs.	L1	4	2
9.	Write a python program to count words in a sentence using split() function.	L2	5	2
10.	What are packages in python?	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Explain in detail about the basic building blocks of algorithm.	L2	1	8
	ii Draw a flow chart to print the first 'n' prime numbers.	L2	1	8
	Or			
b	State and Explain the Towers of Hanoi problem with suitable diagrams.	L2	1	16
12.	a What is the role of an operator? Explain how python works in interpreter mode and interactive mode.	L2	2	16
	Or			
	b i Explain briefly about Constants, Expressions, Keywords in python.	L2	2	8
ii	List down the rules for naming the variable in python.	L2	2	8
13.	a Explain in detail about the types of operators. Give example for each.	L2	3	16
	Or			
b	Explain String functions and analyze the methods with suitable examples.	L2	3	16

14.	a	Explain in detail about List and discuss the list methods available in python.	L2	4	16
		Or			
	b	What is Dictionary? Explain python dictionaries in detail discussing its operations and methods.	L2	4	16
15.	a	Explain about file reading and writing operations with example program.	L2	5	16
		Or			
	b i	Write a program to perform Exception handling.	L2	5	8
	ii	Write a python program to handle Multiple exceptions.	L2	5	8