

Programme: B. Tech CSE
 Course: IT Workshop (Scilab)
 Course Code: 3PCCCS304
 Enrolment no. _____

 Full Marks: 70
 Time: 3 Hrs.

Q. No	Questions	CO	Bloom Taxonomy Category	Marks	
Section I					
1	Short Answer type questions			4 x 5 = 20	
a	What is a variable in MATLAB/Scilab? Explain its role in programming. or List any five functions available in Scilab and briefly state their purposes.	CO1	Understand		
b	Define a dialog box and a menu bar in Scilab. Describe their basic functions. or What is an object handler in Scilab? Explain its basic function.	CO2	Understand		
c	Provide a code snippet demonstrating the use of a "for" loop in Python. or List and explain three fundamental data types in Python.	CO5	Understand		
d	Define sparse array in Scilab with a proper example. or Define subplots and describe how they can be utilized in Scilab for displaying multiple plots in a single figure.	CO4	Understand		
Section II					
Long Answer type questions					
2	Briefly describe two types of plots commonly used for data visualization in Scilab. or What are the purposes of plotting? Explain.	CO3	Understand		3 x 10 = 30
3	a. Write a Python code snippet that uses a "while" loop to perform a repetitive task. b. Discuss two key features of Python that make it a popular language for various applications. or Provide a brief example to demonstrate inheritance in Python.	CO5	Apply		
4	What is the Scilab editor? Write a program in Scilab to calculate and display the average of three subject marks of any student or Define Object-Oriented Programming (OOP) and discuss its core principles, including classes and objects.	CO5	Apply		
Section III					
Application based questions					
5	Take two matrix of size 3X3 and perform the following tasks. (a) Addition (b) Subtraction (c) Multiplication (d) Transpose (e) Sum of diagonal element or Illustrate three string functions in Scilab and explain their purposes with examples.	CO4	Apply	1 x 20 = 20	

COURSE OUTCOME

At the end of the course the candidate will be able to

- CO1: Apply features of Matlab and algorithms to solve problems
- CO2: Develop application programs with the help of various tool boxes available in Matlab.
- CO3: Apply data analysis through graphical data representations
- CO4: Implement programs with the use of arrays, strings in Matlab
- CO5: Implement Functions and loops, using Python