



**JSS MAHAVIDYAPEETHA**  
**JSS ACADEMY OF TECHNICAL EDUCATION, NOIDA**  
**DEPARTMENT OF INFORMATION TECHNOLOGY**

Roll No.

**CIA-I [Even Semester-(AY 2024-25)]**

**Course : B.Tech**  
**Semester : IV<sup>th</sup>**  
**Subject : Python Programming**  
**Time : 1 hrs=60 min**

**Date : 3-05-2025**  
**Subject Code : BCC 402**  
**Max. Marks : 20**

COURSE OUTCOMES				BL/ KC
CO1	Interpret the fundamental Python syntax and semantics and be fluent in the use of Python control flow statements			K1,K2
CO2	Express proficiency in the handling of strings and functions			K1,K2
CO3	Determine the methods to create and manipulate Python programs by utilizing the data structures like lists, dictionaries, tuples and sets			K3
CO4	Identify the commonly used operations involving file systems and regular expressions			K1,K2
CO5	Articulate the Object Oriented Programming concepts such as encapsulation, inheritance and polymorphism as used in python			K2,K3

Section-A					
Attempt all the questions of this section				( 1 X5=5)	
Q. No.	Question			Marks	BL/ KC
1.	a	Mention any two rules for writing python variables.		1	CO1
	b	Define any four of python's built-in data types.		1	CO1
	c	Find the output of the following code. j=5 j=10 k=15 print(i == k/j )		1	CO1
	d	What will be the output of the following statement in python? if num==20: print('Apple') print('Grapes') print('No Output')		1	CO1
	e	Outline any four features of the Python language.		1	CO1

Section-B					
Attempt all the questions of this section				(3X3=9)	
2.	Compare and contrast differences between lists and tuples in Python.	3	CO1		
	OR Explain the Python program lifecycle from source code to execution. What are the key stages involved?				
3.	Discuss all the Logical Operators, Bitwise Operators and Arithmetic Operators in Python with example	3	CO1	2	
	OR What are mutable and immutable objects in Python? What is the difference between them?				
4.	Write a program to swap two values without using third variable	3	CO1	3	
	OR Write a program to display the square of a number having a unit digit as 5				

CO -Course Outcome generally refer to traits, knowledge, skill set that a student attains after completing the course successfully.

Bloom's Level (BL) - Bloom's taxonomy framework is planning and designing of assessment of student's learning.

\*Knowledge Categories (KCs): F-Factual, C-Conceptual, P-Procedural, M-Metacognitive





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**Section-C**

**Attempt all the questions of this section**

**(6X1=6)**

5.	Write a program to test whether a number is divisible by 5 and 10 but not by 15.	6	CO1	3
	OR			
	Write a program that prompts a user to enter two different numbers. Perform arithmetic operations based on choices using multi-way -if- elif-else statements.			

*for Mark*  
*28/4/25*

*Curt*