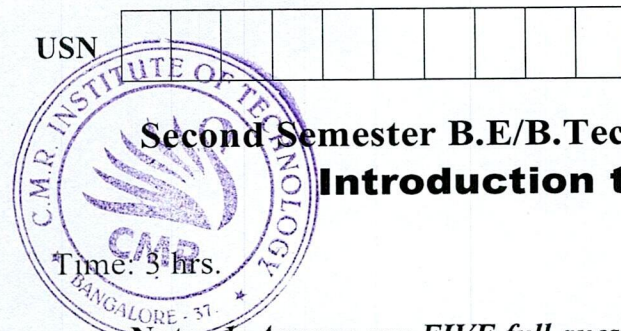USN | | | | | | | | | | |

BPLCK205B

Second Semester B.E/B.Tech. Degree Examination, June/July 2025
Introduction to Python Programming

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
1	a.	Explain String Concatenation and String Replication in Python with example.	7	L2	CO1
	b.	Explain Boolean Operators and Comparison Operators in Python with example.	7	L2	CO1
	c.	Write a program to read the student details like Name , USN and marks in three subjects. Display the student details , total marks and percentage with suitable messages.	6	L3	CO1
		OR			
2	a.	Explain Importing modules in Python with an example program using random and sys modules.	7	L2	CO1
	b.	Explain Exception Handling in Python with example program.	7	L2	CO1
	c.	Write a function to calculate factorial of a number. Write a program to compute binomial co-efficient (Given N and R).	6	L3	CO1
		Module – 2			
3	a.	Explain List Data type with positive and negative indexes with examples.	7	L2	CO2
	b.	Explain any five list methods with examples.	6	L2	CO2
	c.	Read N numbers from the console and create a list. Develop a program to print mean , variance and standard deviation with suitable messages.	7	L3	CO2
		OR			
4	a.	Explain Dictionary Data type with example.	7	L2	CO2
	b.	Explain any five dictionary methods with example.	6	L2	CO2
	c.	Read a multi – digit number (as chars) from the console. Develop a program to print the frequency of each digit with suitable messages. Use pretty printing.	7	L3	CO2

		Module – 3			
5	a.	Explain how to use Escape characters in strings in Python with example.	7	L2	CO3
	b.	Explain the following methods : i) Startswith ( ) ii) endswith ( ) iii) rjust ( ) iv) ljust ( ) v) Center ( ) vi) rstrip ( ) vii) lstrip ( ).	7	L2	CO3
	c.	Write a Python program to display a Tic – Tac – Toe board.	6	L3	CO3
		OR			
6	a.	Explain OS.path module in detail.	7	L2	CO3
	b.	Explain the following methods : i) Open ( ) ii) read ( ) iii) write iv) readlines v) Close ( )	7	L2	CO3
	c.	Explain Shelve module in detail.	6	L2	CO3
		Module – 4			
7	a.	Explain Shutil Module in detail.	10	L2	CO3
	b.	Explain Compressing Files with the ZipFile module.	10	L2	CO3
		OR			
8	a.	Explain the role of Assertions in Python with a suitable program.	10	L2	CO3
	b.	Explain the support for Logging with logging module in Python.	10	L2	CO3
		Module – 5			
9	a.	Explain the concept of class in Python in detail.	10	L2	CO4
	b.	Explain the concept of pure functions and modifiers in Python in detail.	10	L2	CO4
		OR			
10	a.	Explain Object – Oriented features in detail.	10	L2	CO4
	b.	Develop a program that uses class student which prompts the user to enter marks in three subjects and calculates total marks, percentage and displays the score card details. [Hint : Use list to store the marks in three subjects and total marks. Use _ init_ ( ) method to initialize name , USN and the lists to store marks and total. Use getmarks ( ) method to read marks into the list and display ( ) method to display the score card details].	10	L3	CO4

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