

Code: 20CS6421

II B.Tech - II Semester – Regular Examinations – MAY 2023

**ADVANCED PYTHON PROGRAMMING
(HONORS in COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	Outline the several options which are available for rounding to keep values within the desired precision and Illustrate the usage with the help of a code snippet.	L2	CO1	7 M
	b)	Explain how to generate the Random Numbers using random() module.	L2	CO1	7 M
OR					
2	a)	Develop a Python Program to show how floating point calculations results in 2 types of exceptional values.	L3	CO1	7 M
	b)	Demonstrate the usage of Logarithmic functions with an example.	L2	CO1	7 M

UNIT-II					
3	a)	Explain how to find the multiple matches for a certain pattern ‘ab’ from the text ‘abbaaabbbbbaaaaa’.	L2	CO2	7 M
	b)	Demonstrate the use of different ‘text wrap’ functions to format the text paragraphs.	L3	CO2	7 M
OR					
4	a)	Identify the importance of “re” module for searching the patterns in a text.	L3	CO2	7 M
	b)	Develop a Python Program to compare Arbitrary Types using Sequence Matcher function.	L3	CO2	7 M
UNIT-III					
5	a)	Explain the functions which are used to Merge and Split the Iterators with the help of defining the code snippets.	L2	CO3	7 M
	b)	Demonstrate the process of Signalling between two different threads.	L3	CO3	7 M
OR					
6	a)	Develop a Python Program to show how Daemon Processes works.	L3	CO3	7 M
	b)	Explain the importance of Item Getters into the sequence of Operators.	L4	CO3	7 M
UNIT-IV					
7	a)	Illustrate the process of Creating and Accessing the contents of heap using heapq module.	L2	CO4	7 M

	b)	Develop a Python Program to insert items into a list in sorted order from bisect module.	L3	CO4	7 M
OR					
8		Distinguish between various Container data types in Collections module.	L4	CO5	14 M
UNIT-V					
9	a)	Explain the process of Caching Objects using appropriate APIs of weakref module.	L4	CO4	7 M
	b)	Compare the functionality between Packing and Unpacking of Struct Class.	L4	CO5	7 M
OR					
10		Demonstrate all the functionalities of pprint Data Structure.	L3	CO4	14 M