**III B.Tech - I Semester – Regular Examinations - DECEMBER 2022** 

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

Duration: 3 hours

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	СО	Max.			
					Marks			
	UNIT-I							
1	a)	Develop a Python Program to convert the	L3	CO2	7 M			
		following decimals into fractions:						
		i) 0.1 ii) 0.5 iii) 1.5						
	b)	Develop a Python Program to impose	L3	CO2	7 M			
		Positive and Negative signs of a number.						
	OR							
2	a)	Demonstrate the function of Saving State	L2	CO1	7 M			
		using random module.						
	b)	Illustrate how the exponentiation operator	L2	CO1	7 M			
		helps in solving the problems.						
UNIT-II								
3	a)	Develop a Python Program to remove the	L3	CO2	7 M			
		existing Indentation using one of text wrap						
		functionality.						

Max. Marks: 70

	b)	Compare 2 different bodies of text using	L2	CO2	7 M
		difflib module.			
	1	OR		II	
4	a)	Illustrate with an example, how to modify	L3	CO2	7 M
		Strings with some specific patterns.			
	b)	Discover the importance of Templates in	L3	CO2	7 M
		Strings for interpolation.			
		UNIT-III			
5	a)	Interpret the function groupby() of itertools	L2	CO3	7 M
5	<i>u)</i>	module.			/ 1/1
	b)	Explain the process of using a decorator	L2	CO3	7 M
		which convert a generator function into a			
		context manager.			
		OR		<u> </u>	
6	a)	Demonstrate the Producer Consumer	L2	CO3	7 M
		Problem by Synchronizing the threads.			
	b)	List the different exit codes and illustrate its	L3	CO3	7 M
		usage in Process Exit status.			
7		UNIT-IV	10		7 ) (
7	a)	Interpret the functionality of namedtuple	L3	CO4	7 M
	1-)	from Collections module.	1.2	COA	7 \ (
	b)	Develop a Python Program to show how to	L3	CO4	7 M
		handle the duplicates by using insort			
		function.			
		OR			

			<b>T O</b>	001	<b>7</b> ) (	
8	a)	Illustrate how the contents of an array can	L3	CO4	7 M	
	be written to and read from files using built-					
		in methods.				
	b)	Discuss the three forms of initialization by	L3	CO4	7 M	
		counter container from Collections package.				
UNIT-V						
9	a)	Analyze the differences between basic FIFO	L4	CO5	7 M	
		Queue and LIFO Queue.				
	b)	Identify the importance of Reference	L2	CO5	7 M	
		Callbacks in weakref module.				
OR						
10	Cor	npare Shallow copy & Deep copy and	L4	CO5	14 M	
	dev	elop a Python Program to show the				
	sign	nificant comparison between shallow and				
	Dee	ep Copies.				