STD: XIIS   **COMPUTER SCIENCE (083)   MM: 25 TIME:1HR**

INSTRUCTIONS:

Q1. Programming Language: Python, MYSQL

Q2. All questions are compulsory.

Q1.	Name the built-in mathematical function / method that is used to return an absolute value of a number	1

Q2.	Find an output of the following code
	``def func(b):
	    global x
	    print('Global x=', x)
	    y = x + b
	    x = 7
	    z = x – b
	    print('Local x = ',x)
	    print('y = ',y)
	    print('z = ',z)```
		``x=5
		func(10)```
			2

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Q3.	```def get(x,y,z):
	    x+=y
	    y-=1
	    z*=(x-y)
	    print(x,'#',y,'#',z)
	def put(z,y,x):
	    x*=y
	    y+=1
	    z*=(x+y)
	    print(x,'$',y,'$',z)```
		``a=10
		b=20
		c=5
		put(a,c,b)
		get(b,c,a)
		put(a,b,c)
		get(a,c,b)```
		Find an output of the following code.
			2

Q4.	Write a python program to accept username "Admin" as default argument and password to entered by the user to allow login into the system	3

Q5.	Write and explain the types of functions supported by python.	2

Q6.	Write add(Books) and delete(Books) methods in Python to add Books and remove Books considering them to act as append() and pop() operations in Stack.	3

Q7.	What do you mean by the LIFO structure? Support your answer with real-life examples	2

Q8.	Write a python function to: 1. Insert an element at the top of the stack 2. Delete an element at the top of the stack	2

Q9.	Write a program using function to accept a number and find out whether it is a perfect number or not. {Hints: Perfect number, a positive integer that is equal to the sum of its proper divisors.}	2

Q10.	Differentiate between actual parameter(s) and a formal parameter(s) with a suitable example for each	2

Q11.	Write a function called removeFirst that accepts a list as a parameter. It should remove the value at index 0 from the list. Note that it should not return anything (returns None). Note that this function must actually modify the list passed in, and not just create a second list when the first item is removed. You may assume the list you are given will have at least one element.	2

Q12.	Write a function in Python PUSH (Arr), where Arr is a list of numbers. From this list push all the numbers divisible by 5 into a stack implemented by using a list. Display the stack if it has at least one element, otherwise display appropriate error message	2