22025

CBCS SCHEME

USN | | | | | | | | | | | 　　　　　　BPLCKB105/BPLCK105B

First Semester B.E/B.Tech Degree Examination, June/July 2023
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
Q.1	a.	List and explain math operators used in Python with example.	7	L2	CO1
	b.	Write a Python program to check whether the number is even or odd.	6	L3	CO1
	c.	With an example explain user defined functions.	7	L2	CO1
		OR			
Q.2	a.	With an example explain the following built-in functions : i) print( ) ii) input( ) iii) len( ).	6	L1	CO1
	b.	How to handle exceptions in Python explain with an example.	8	L1	CO1
	c.	Write a program to print even numbers using step size in range( ).	6	L3	CO1
		Module – 2			
Q.3	a.	Explain the following list methods with examples. •index( ), •append( ), •insert( ), •sort( ), •reverse( ).	10	L2	CO2
	b.	Write a python program to create a dictionary of 10 key-value pairs and print only keys on the screen.	5	L3	CO2
	c.	Explain in and not in operators used in lists with an example.	5	L1	CO2
		OR			
Q.4	a.	Show that lists are mutable.	6	L1	CO2
	b.	Write a program to count the frequency of characters using module PPrint(Pretty Printing).	8	L2	CO2
	c.	Explain random.choice and random.shuffle functions with lists.	6	L1	CO2

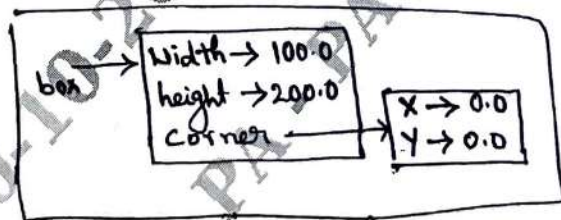|					
		Module – 3			
Q.5	a.	Write the output of following Python code >>>Spam = 'Hello, World!' i) >>>Spam[0] ii) >>Spam[4] iii) >>>Spam[-1] iv) Spam[0 : 5] v) >>> Spam [:5] vi) >>>Spam[7 :].	6	L1	CO3
	b.	Write a program to accept string and display total number of alphabets.	6	L3	CO3
	c.	Explain how to save variables with the Shelve module.	8	L1	CO3
		OR			
Q.6	a.	Explain the following string methods with examples : i) isalpha( ) ii) isalnum( ) iii) isdcimal( ) iv) isspace( ) v) istitle( ).	10	L1	CO3
	b.	Write a Python program that repeatedly asks users for their age and a Password until they provide valid input. [age is in digit and Password in alphabet an digit only].	6	L3	CO3
	c.	Differentiate between Absolute and relative paths in specifying file paths.	4	L2	CO3
		Module – 4			
Q.7	a.	Show that files and folders can be copied using Shutil module.	8	L1	CO4
	b.	Write a note on Raising exceptions in Python.	7	L1	CO4
	c.	Explain five buttons available in the Debug Control Window.	5	L2	CO4
		OR			
Q.8	a.	Describe logging levels used in Python to categorize log messages by importance.	10	L2	CO4
	b.	With example show how files and folders can be permanently deleted.	10	L1	CO4
		Module – 5			
Q.9	a.	Write a program to implement the following object diagram and its functionality as shown in Fig.9(a). Initialize the attributes through a constructor and print the same. Fig.Q9(a)	10	L3	CO4
	b.	Discuss operator overloading. Mention any five operators with respective special functions to be overloaded in Python.	10	L2	CO4
		OR			
Q.10	a.	Explain the following with an example : i) isinstance( ) ii) hasattr( ) iii) copy.copy iv) copy.deepcopy( ).	8	L2	CO4
	b.	Write a program to explain pure function and modifier function.	12	L3	CO4

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