CBCS SCHEME

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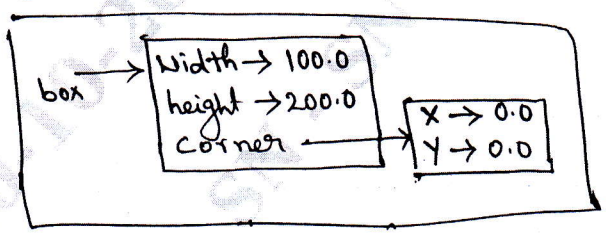
BPLCKB105/BPLCK105B

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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