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BPLCK205B/BPLCKB205

Second 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.	Demonstrate with example print ( ), input ( ) and string replication.	6	L3	CO1
	b.	Develop a program to generate Fibonacci square of length (N). Read N from the console.	6	L3	CO1
	c.	Explain elif, for , while , break and continue statements in python with examples for each.	8	L2	CO1
		OR			
Q.2	a.	What are user defined functions? How can we pass parameters in user defined functions? Explain with suitable example.	5	L1	CO1
	b.	Explain Local and Global scope with variables for each.	8	L2	CO1
	c.	Develop a program to read the name and year of birth of a person. Print whether the person is a senior citizen or not.	7	L3	CO1
		Module – 2			
Q.3	a.	What is a List? Explain append ( ) , insert ( ) and remove ( ) methods with examples.	8	L2	CO2
	b.	Explain the following methods with example : i) keys ( ) ii) values ( ) iii) items ( ) in a dictionary.	12	L2	CO2
		OR			
Q.4	a.	How is tuple different from a list and which function is used to convert list to tuple? Explain.	6	L2	CO2
	b.	List the merits of dictionary over list.	4	L1	CO2
	c.	Read N numbers from the console and create a list. Develop a program to compute and print mean , variance and standard deviation with messages.	10	L3	CO2
		Module – 3			
Q.5	a.	Explain the following methods with suitable examples : i) upper ( ) ii) lower ( ) iii) is_upper ( ) iv) is_lower ( )	8	L2	CO3
	b.	Illustrate with example opening of a file with open ( ) function, reading the contents of the file with read ( ) and writing to files with write ( ).	12	L2	CO3

		OR			
Q.6	a.	Explain the steps involved in adding bullets to Wiki – Markup. Support with appropriate code.	10	L2	CO3
	b.	Develop a program to sort the contents of a text file and write the sorted contents into a separate text file. [Use strip ( ) , len ( ) , list methods sort ( ) , append and file methods open ( ) , readlines ( ) and write ( )].	10	L3	CO3
		Module – 4			
Q.7	a.	How do you copy files and folders using Shutil module? Explain in detail.	6	L2	CO3
	b.	What are Assertions? Write the contents of an assert statement. Explain them with examples.	8	L2	CO3
	c.	Illustrate the logging levels in python. ·	6	L2	CO3
		OR			
Q.8	a.	With suitable code, explain Backing up a Folder into a Zip file. Clearly mention the steps involved.	12	L2	CO3
	b.	Explain the logging module and debug the factorial of number program.	8	L3	CO3
		Module – 5			
Q.9	a.	What is a Class? How to define class in Python? How to initiate a class and how the class members are accessed?	8	L2	CO4
	b.	Define Pure function. Illustrate with an example Python program.	8	L3	CO4
	c.	Explain Printing objects.	4	L1	CO4
		OR			
Q.10	a.	What is Polymorphism? Demonstrate polymorphism with functions to find histogram to count the numbers of times each letters appears in a word and in sentence.	10	L3	CO4
	b.	Write Deck methods to add, remove shuffle and sort cards, with illustrating the problem.	10	L2	CO4

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