MAKE-UP EXAM

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BPLCK205B/ BPLCKB205

Second Semester B.E./B.Tech. Degree Examination, Nov./Dec. 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 format ( ).	5	L1	CO1
	b.	Explain conditional branching statements with syntax and write a suitable program for the same.	7	L2	CO1
	c.	Write a python program to check whether a given number is Armstrong or not. [Hint – An Armstrong number is any number of n digits which is equal to the sum of n^{th} power of digits in the number. For example, 371 is an Armstrong number since 3**3 + 7**3+1** 3 = 371]	8	L3	CO1
		OR			
Q.2	a.	Write a python program to guess the secret number between 1 to 25 within 5 guess if the number is same then it is right guess else wrong guess.	8	L3	CO1
	b.	What are user defined function? How can we pass the arguments to the functions? Explain with suitable examples.	6	L1	CO1
	c.	What are comparison and Boolean operators? List all the comparison and Boolean operators in python.	6	L1	CO1
		Module – 2			
Q.3	a.	Explain the methods of list data types in python for the following operation with suitable code snippets for each. i) Adding values to a list ii) Removing values from a list iii) Finding a value in a list iv) Sorting the values in a list	8	L1	CO2
	b.	Explain the concept of list slicing and list traversing with an example.	6	L1	CO2
	c.	What is a dictionary? Write a python program to count occurrences of characters in a string and print the count.	6	L3	CO2
		OR			
Q.4	a.	Write a python program that find the missing number from the given a list n-1 numbers ranging from 1 to n, There are no duplicates (Hint – eg : Input = 1 2 4 6 3 7 8, output : 5)	10	L3	CO2
	b.	How is triple different from list( )? Explain with example the function used to convert list into triple and triple into list.	6	L1	CO2
	c.	Explain insert( ) and remove( ) methods of list with example.	4	L1	CO2

		Module – 3			
Q.5	a.	Write a python program to count number of lines in a file.	5	L3	CO1
	b.	Explain the following functions with example : i) makedirs( ) ii) getcwd( ) iii) velpath( ) iv) listdir( ) v) sub( )	10	L1	CO1
	c.	What are three "mode" arguments that can be passed to open( ) function with example.	5	L1	CO1
		OR			
Q.6	a.	With code snippet, explain saving variables using the shelve module and print pformat( ) functions.	6	L2	CO2
	b.	Write a python program that accepts a sentence and find the number of words, digits, upper case letters and lower case letters.	7	L3	CO2
	c.	Write a program to make a new string with all the consonant eliminated from the string read from the user [Hint – For example Input: Hello, have a good day. Output : HII, hv gd dy]	7	L3	CO2
		Module – 4			
Q.7	a.	What is meant by compressing Files? Explain reading, extracting and creating ZIP files with an example.	10	L1	CO1
	b.	Define assertions. What does an assert statement in python consists of?	5	L1	CO2
	c.	How does OS.walk( ) work in python?	5	L3	CO3
		OR			
Q.8	a.	Discuss the basicConfig( ) method to configure the lagging with an example.	7	L2	CO2
	b.	Write a program to depict Raising Exception.	7	L1	CO2
	c.	Explain the functions of Shutil module with example.	6	L2	CO2
		Module – 5			
Q.9	a.	Compare the difference between class, static and instance method.	6	L2	CO4
	b.	Define classes and objects in python. Create a class called Employee and initialize it with employee id and name. Design method to : i) Set Age – to assign age to the employee ii) Set Salary – to assign salary to the employee iii) Display – to display all information of the employee.	9	L2	CO4
	c.	Explain ---- init ---- and str --- method with an example.	5	L2	CO4
		OR			
Q.10	a.	Write a program to implement polymorphism in python using method overriding.	7	L3	CO4
	b.	Define pure function? Give an example program that returns square of a passed integer.	7	L3	CO4
	c.	How class can be instantiated in python? Write a python program to instances as return values to define a class RECTANGLE with member width. Height cornerX cornerY and member function to find center area and perimeter of a rectangle.	6	L2	CO4

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