First Semester B.E./B.Tech. Degree Supplementary Examination, June/July 2024
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.	Explain the following functions with examples: i) input ii) print iii) len iv) str v) int	10	L2	CO1
	b.	Explain **if** and **elif** control statements with syntax and flowchart.	5	L2	CO1
	c.	Write a program to read name and year of birth of a person. Display whether the person is a senior citizen or not.	5	L3	CO1
		OR			
Q.2	a.	Explain the following with example: i) Def Statements with Parameters ii) Parameters and Return Values	8	L3	CO1
	b.	Explain the following, with syntax and example: i) for loop ii) break iii) continue	12	L3	CO1
		Module – 2			
Q.3	a.	Define list. Explain append( ), index( ), sort( ) and insert( ) list methods with example.	10	L3	CO2
	b.	Read 10 numbers from a console and create a list. Develop a program to print the elements of created list, sorted list and reversed list.	6	L3	CO2
	c.	Explain copy( ) and deepcopy( ) functions of copy module.	4	L3	CO2
		OR			
Q.4	a.	Define dictionary. Explain the following methods of dictionary i) setdefault ii) get iii) keys iv) items	10	L2	CO2
	b.	Write a program to count the number of occurrences of each letter in a given string. Use pretty print to format your output.	10	L3	CO3
		Module – 3			
Q.5	a.	Explain how individual elements of a string are accessed. How to extract a part of a string? Explain with examples.	10	L3	CO3
	b.	Explain any 5 string methods with syntax and example.	10	L3	CO3

		OR			
Q.6	a.	Explain any 5 methods in os.path module related to files.	10	L2	CO3
	b.	Explain file reading and writing process with example.	10	L3	CO3
		Module – 4			
Q.7	a.	Write a program to display folder name, list of subfolders, and files in the working directory using os.walk( ).	5	L3	CO3
	b.	Explain the following with respect to shutil module. i) Copying files and folders ii) Moving and renaming files and folders.	8	L3	CO3
	c.	Write a program to backup a folder into a ZIP file.	7	L3	CO3
		OR			
Q.8	a.	What is an assertion? Explain how to use assert keyword with an example.	7	L3	CO3
	b.	Explain the different logging levels.	7	L2	CO3
	c.	Demonstrate reading and extracting from zip files using zipfile module.	6	L3	CO3
		Module – 5			
Q.9	a.	Explain _ _ init_ _, _ _str_ _, _ _add_ _ methods with example.	12	L3	CO4
	b.	Explain type based dispatch with example.	8	L3	CO4
		OR			
Q.10	a.	Define classes and objects. Write a program to create a class called student with attributes name, usn, sem, sec and create two student objects. Read and print the details of two students using appropriate methods.	12	L3	CO4
	b.	Explain pure functions with examples.	8	L3	CO4

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