PCET LIBRARY BANGALORE

CBCS SCHEME

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BPLCK105B

First Semester B.E./B.Tech. Degree Examination, June/July 2026
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.	Write a program in python to read employee data from the console and print the details using suitable messages. Input Data: Employee Name, Id, Salary, address.	6	L3	CO1
	b.	Explain the following statements in python with syntax and examples. i) If statement ii) If – else statement iii) If – elif – else statement.	8	L2	CO1
	c.	Explain two ways of importing modules into application in python with syntax and examples.	6	L2	CO1
		OR			
Q.2	a.	Explain the following control transfer statements in python with examples.	8	L2	CO1
	b.	Explain four scope rules of variables in python.	6	L2	CO1
	c.	Write a function in python to find the factorial of a number. Develop a program to compute binomial coefficient.	6	L3	CO2
		Module – 2			
Q.3	a.	Read N numbers from console of create a list. Develop a program to find the largest and smallest among the list.	8	L3	CO2
	b.	Explain with a example to each. i) get ( ) ii) set default ( )	6	L2	CO2
	c.	Explain append( ) and index( ) functions with respect to list in python.	6	L2	CO2
		OR			
Q.4	a.	Read a multi-digit number (as chars) from the console. Develop a program to print the frequency of each digit with messages.	7	L3	CO3
	b.	Tuples are immutable. Explain with python program example.	6	L2	CO2
	c.	Develop a program to swap cases of given string. Input : Python Output : PYTHON	7	L3	CO3

		Module – 3			
Q.5	**a.**	Explain reading and saving python program variables using shelve module with messages.	**8**	**L2**	**CO3**
	b.	Explain Join( ) and Split( ) methods with examples.	**8**	**L2**	**CO3**
	c.	Write a program in python to read and print the contents of a text file.	**4**	**L3**	**CO3**
		OR			
Q.6	**a.**	Explain python string handling methods with examples : startswith ( ), rjust( ), strip( ), rstrip( ).	**12**	**L2**	**CO3**
	b.	Explain with suitable python program segments : i) os.path.base name( ) ii) os.path.join( )	**8**	**L2**	**CO3**
		Module – 4			
Q.7	**a.**	Develop a program to backing up a given folder into a zip file by using relevant modules and suitable methods.	**8**	**L3**	**CO3**
	b.	Explain the benefits of lagging module giving suitable example.	**6**	**L2**	**CO3**
	c.	List the differences between shutil.copy( ) and shotil.copytree( )	**6**	**L2**	**CO3**
		OR			
Q.8	**a.**	What are assertions and raising an exception?	**6**	**L2**	**CO3**
	b.	Develop a python program the traverse the current directory by listing sub.folders and files.	**8**	**L3**	**CO3**
	c.	Explain IDLE's Debugger.	**6**	**L2**	**CO3**
		Module – 5			
Q.9	**a.**	Define Pure function and Modifier. What is the role of pure function and modifiers in applications development with suitable python program?	**8**	**L2**	**CO4**
	b.	Briefly explain printing of an object with an example.	**6**	**L2**	**CO4**
	c.	Explain the program development concept 'Prototype and Patch' with example.	**6**	**L2**	**CO4**
		OR			
Q.10	**a.**	Explain the following with syntax and suitable code snippet : i) Class definition ii) Instantiation iii) Passing and instance (or object) as argument iv) Instances as return values	**10**	**L3**	**CO4**
	b.	Develop a program that uses class student, which prompts the user to enter marks in three subjects and calculate total Marks, Percentage and display the score card details.	**10**	**L3**	**CO4**

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