



Second Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

### 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.	Describe the following flow control statements in python programming: (i) if (ii) else (iii) while		8	L1	CO1
	b.	Write a function to calculate factorial of a number.		8	L3	CO1
	c.	Define def statements with parameters.		4	L1	CO1
OR						
Q.2	a.	Explain the syntax and control flow diagrams for break and continue statement.		8	L2	CO1
	b.	Illustrate the dissection of python program.		8	L2	CO1
	c.	Describe the return values and return statements.		4	L1	CO1
Module – 2						
Q.3	a.	Read N numbers from the console and create a list. Develop a program to print, mean, variance and standard deviation with suitable messages.		8	L3	CO2
	b.	Summarize the sequence data types of python programming.		8	L2	CO2
	c.	Compare and contrast dictionaries Vs lists.		4	L2	CO2
OR						
Q.4	a.	Develop a program to print 10 most frequently appearing words in a text file. [Hint : Use dictionary with distinct words and their frequency of occurrences. Sort the dictionary in reverse order of frequency and display dictionary slice of first 10 items].		8	L3	CO2
	b.	Explain the slots of tic – tac – toe board with its corresponding keys using data structures in python programming.		6	L2	CO2
	c.	Paraphrase the working with lists in python programming.		6	L1	CO2
Module – 3						
Q.5	a.	Describe the Python string handling methods with examples : Split ( ), endswith ( ), ljust ( ), center ( ), lstrip ( ).		10	L2	CO3
	b.	Summarize the process of input validation in python programming.		10	L2	CO3

OR						
Q.6	a.	Explain Python string handling methods with examples : join ( ), startswith ( ), rjust ( ), strip ( ),rstrip ( ).		10	L2	CO3
	b.	Demonstrate the process of copying and pasting strings with pyperclip module.		10	L2	CO3
Module – 4						
Q.7	a.	Develop a program to backing up a given folder (Folder in a current working directory) into a zip file by using relevant modules and suitable methods.		10	L3	CO3
	b.	Describe the file reading or writing process in python programming.		10	L2	CO3
OR						
Q.8	a.	Explain the process of compressing files with the zip file module.		10	L2	CO3
	b.	Summarize the organization of files using shutil module.		10	L3	CO3
Module – 5						
Q.9	a.	Explain about class and objects.		10	L2	CO4
	b.	Explain purefunction and modifier.		10	L2	CO4
OR						
Q.10	a.	Illustrate operator overloading and polymorphism in python with an example.		10	L2	CO4
	b.	Explain _init_ and _str_ method with examples.		10	L2	CO4

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